Form 3160-3 (December 1990)

# NITED STATES DEPAR. ENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

SUBMIT RIPLICATE\*
(Oth uctions on

Form approved. Budget Bureau No. 1004-0136 Expires: December 31, 1991

		OR PERMIT TO D				
1 a. TYPE OF WORK	DRILL X	DEEPEN			5. LEASE DESIGNATION AND ML 458	
b. TYPE OF WELL OIL WELL	GAS X	OTHER - COALBED METHANE	SINGLE , MULTIPLE ZONE ZONE		6. IF INDIAN, ALLOTTEES OR	TRIBE NAME
2. NAME OF OPERATOR			· · · · · · · · · · · · · · · · · · ·		7. UNIT AGREEMENT NAME	
	ANADARI	KO PETROLEUM COF	RPORATION			
3. ADDRESS AND TELEP	HONE NO.				8. FARM OR LEASE NAME WE	ELL NO.
	17001 Northchase Dri	ve, Houston, Texas 7	7060 281/875-1101		Helper Sta	te A-1
LOCATION OF WELL (F At surface	Report location clearly and in acco	ordance with any State require	ements.)		9. API WELL NO.	
	1621 FNL & 2	2019 FWL, NW Section	13, T14S R10E		10. FIELD AND POOL OR WIL	DCAT
At proposed prod. zone	Q # 2	613			Helper CBM	
	1621 FNL & 2	2019 FWL, NW Section	13, T14S R10E		11. SEC. T,R,M, OR BLK. AND SURVEY OR AREA	
					Section 3, T1	4S R10E
14. DISTANCE IN MILES	AND DIRECTION FROM NEARES	or town or post office.  2 miles N of Price, U	t		12. COUNTY  Carbon	13. STATE Utah
15. DISTANCE FROM PRO NEAREST PROPERTY (Also to nearest drig, u	OR LEASE LINE, FT.	1621'	16. NO. OF ACRES IN LEASE 2441'	17. NO. OF ACR	ES ASSIGNED TO THIS W 160	ELL.
18. DISTANCE FROM PR NEAREST WELL, DR APPLIED FOR, ON TH	ILLING, COMPLETED, OR	2000'	19. PROPOSED DEPTH 2900'	20. ROTARY OF	R CABLE TOOLS Rotary	
21. ELEVATIONS (Show w	hether DF, RT, GR, etc.)				22. APPROX. DATE WO	RK WILL START.
		6040' GR			1/28/9	97
23.		PROPOSED CA	ASING AND CEMENTING PROGRAM			
SIZE OF HOLE	GRADE, SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH		QUANTITY OF CEMENT	
12 1/4"	8 5/8"	24	300'		200 cu. ft.	
7 7/8"	5 1/2"	17	2900'		300 cu. ft.	

Attached is the following:

- 1. Survey Plat
- 2. Drilling Plan with BOP Schematic.
- 3. Surface Use Plan.
- 4. Topo & Access Map & Area Map.
- 5. Pit & Pad Layout with cross sections of pit, pad, & rig layout.
- 6. Self-Certification of Operator.

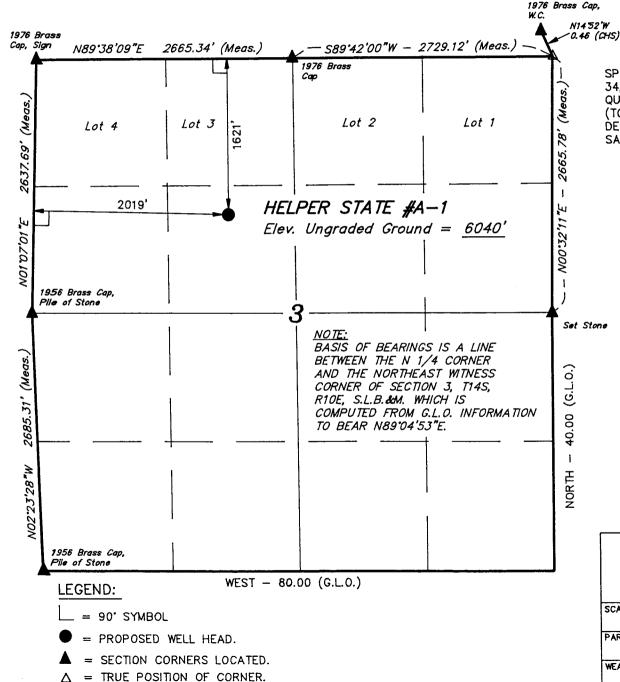
The Cultural Resource Study will be submitted under separate cover.

	CE, DESCRIBE PROPOSED PROGRAM: If proposal is to deepen, epertinent data on subsurface locations and measured and true ve			ne. If proposal is to drill	or deepen
24. SIGNED	Davel minester	TITLE	D.R. Winchester Division Drilling Engineer	DATE	1/15/97
(This space for I	Federal or State office use.)				-
PERMIT NO.	43-007-30349		APPR	OVAL DATE	
	roval does not warrant or certify that the applicant holds legal or equ F APPROVAL IF ANY:	uitable title to those rights in th	ne subject lease which would entitle the a	pplicant to conduct ope	rations theron.
APPROVED BY	oh K. Daga	TITLE Petro	slaum Engineer	DATE	+/17/97

### ANADARKO PETROLEUM CORP.

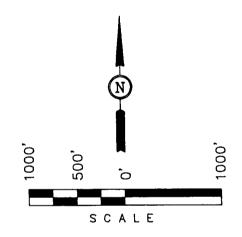
Well location, HELPER STATE #A-1, located as shown in the SE 1/4 NW 1/4 of Section 3, T14S, R10E, S.L.B.&M. Carbon County, Utah

## T14S. R10E. S.L.B.&M.



#### BASIS OF ELEVATION

SPOT ELEVATION NEAR THE SOUTHEAST CORNER OF SECTION 34, T13S, R10E, S.L.B.&M. TAKEN FROM THE HELPER QUADRANGLE, UTAH, CARBON COUNTY, 7.5 MINUTE QUAD. (TOPOGRAPHIC MAP) PUBLISHED BY THE UNITED STATES DEPARTMENT OF THE INTERIOR, GEOLOGICAL SURVEY. SAID ELEVATION IS MARKED AS BEING 6350 FEET.



#### CERTIFICATE

THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS PREPARED FROM FIELD NOTES OF ACTUAL SURVEYS MADE BY ME OR UNDER MY SUPERVISION AND THAT THE SAME ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEE

REGISTERED LAND SURVEYOR REGISTRATION NO. 161319

UINTAH ENGINEERING & LAND SURVEYING

85 SOUTH 200 EAST - VERNAL, UTAH 84078

(801) 789-1017

	(/				
SCALE 1" = 1000'		DATE SURVEYED: 9-10-96	DATE DRAWN: 9-18-96		
PARTY L.D.T. K.S.	C.B.T.	REFERENCES G.L.O. PLAT		1	
WEATHER		FILE			
COOL		ANADARKO F	ETROLEUM CORP.		

## DRILLING PLAN TO ACCOMPANY APPLICATION FOR PERMIT TO DRILL

Company:

Anadarko Petroleum Corporation

Well: Helper State A-1

Location:

1621' FNL & 2019' FWL

Lease: ML 45805

NW Sec 3-T14S-R10E

Surface Elevation: 6040'

#### A. Estimated Tops of Important Geologic Markers:

GEOLOGIC MARKER	DEPTH
Mancos / Emery	Surface
Bluegate Shale	1290'
Ferron Sandstone	2290'
Ferron Coal Top	2320'
Base of Ferron Coal	2470'
Tununk Shale	2520'

B. <u>Estimated Depth at which Water, Oil, Gas or other Mineral-Bearing zones are expected to be encountered</u>:

Gas-bearing Ferron Coal is expected to be encountered from 2320'-2470'.

All fresh water zones and prospectively valuable mineral zones encountered during drilling will be recorded by depth and adequately protected. All oil and gas shows will be tested to determine commercial potential.

#### C. Pressure Control Equipment:

A 9" 3000 psi WP double gate hydraulic BOP with pipe rams and blind rams will be installed on the 8-5/8" casinghead. The BOP stack will be tested prior to drilling below surface casing. The ram preventers will be tested to 70% of the working pressure of the casinghead. The annular will be tested to 50% of its working pressure. Operational checks will be made daily or on trips. A BOP schematic is shown on attached Exhibit "A".

The BOP system will be consistent with API RP 53. Pressure tests will be conducted before drilling out from under all casing strings which are set and cemented in place. Blowout preventer controls will be installed prior to drilling the surface casing plug and will remain in use until the well is completed or abandoned. Preventers will be inspected and operated at least daily to ensure good mechanical working order. This inspection will be recorded on the daily drilling report. Preventers will be pressure tested before drilling casing cement plugs. The accumulator system will meet IADC guidelines concerning pump capacities, storage capacity, and reservoir volume. Closing unit fluid volume will be sufficient to pre-charge the system to operating pressure plus 50% excess. One set of controls will be in the doghouse on the rig floor and one set will be remote on the drilling pad.

#### D. Casing Program

Surface Casing

8-5/8" casing will be set at approximately 300'.

**Production Casing** 

5-1/2" casing will be set at approximately 2900' if

well is to be completed.

	SIZE	WT./FT.	GRD.	THRD.	CONDITION
Surface	8-5/8"	24.0	K-55	8rd	New
Production	5-1/2"	15.5	K-55	8rd	New

#### Casing Design Factors

The safety factors on casing strings will equal or exceed the following values:

Collapse 1.0 Joint Strength 1.6 Burst 1.33

#### Cement Program

Surface - Cement will be circulated to the surface. Casing will be cemented with approximately 200 cu. ft. of API Class 'G' cement.

Production - Casing will be cemented with approximately 300 cu. ft. of API Class 'G" cement. The actual cement volume will be based upon hole depth and gauge, and will be determined from logs.

Additional additives will be used to retard the cement, accelerate the cement, control lost circulation, or control fluid loss. All cementing will be done in accordance with API cementing practices.

#### E. Mud Program and Circulating Medium:

Fresh water circulated through the reserve pit will be used for drilling the 12-1/4" surface hole to 300'. An air or air/mist system will be used for drilling from below surface pipe at 300' to TD.

The mud system will be visually monitored.

A truck-mounted air drilling rig may be used to drill the surface hole to 300' and to pre-set the surface casing before moving a drilling rig on location to drill the rest of the hole to TD.

Sufficient mud materials will be stored at the wellsite to maintain mud requirements and to control minor well control or lost circulation problems.

#### F. Coring, Logging, and Testing Program:

- a. Rotary sidewall coring in the Ferron Sandstone interval (2290'-2470') may be performed, depending upon shows and hole conditions.
- b. DST's may be run depending upon shows.
- c. The following logging program is planned:
  - 1. DIL-ML-SP-GR-CAL over prospective intervals.
  - 2. SDL-CNL-GR-CAL over prospective intervals.
- d. A mud logging unit with chromatograph will be used from approximately 300' to TD.

e. Productive zones will be swab tested. Water produced during testing will be contained in the temporary reserve pit. All produced oil will be stored and sold. Gas will be flared during testing.

## G. <u>Abnormal Conditions and Potential Hazards</u>:

Abnormal conditions such as abnormal temperatures or pressures are not anticipated. Potential hazards such as  $H_2S$  are also not anticipated.

## SURFACE USE PLAN TO ACCOMPANY APPLICATION FOR PERMIT TO DRILL

Anadarko Petroleum Corporation
Helper State A-1
1621' FNL & 2019' FWL, NW Sec 3-T14S-R10E
Carbon Co., Utah

- 1. Existing Roads: See Map A and Map B.
  - a. Location of proposed well in relation to town or other reference point: Location is approximately 2.0 miles north of Price, Utah.
  - b. Proposed route to location: (See Map "A" for marked access).
  - c. Location and description of roads in the area: (See Map "A" and Map "B").
  - d. Plans for improvement and/or maintenance of existing roads: The existing roads will be maintained in the same or better condition as existed prior to the commencement of operations.

#### 2. Planned Access Roads:

- a. The existing and proposed roads will be crowned, ditched or dipped from the existing County road to the location prior to use for moving the drilling rig onto the site. The maximum disturbed width will not exceed 30' with an eighteen foot running surface. Dust will be controlled by the use of water or an approved dust retardant. All roads, including access to drilling water, will be maintained in as good or better condition than existing condition.
- b. Maximum grades: Maximum grade will be less than 10%.
- c. Turnouts: None planned.
- d. Location: Access to the location uses an existing road up to the location. New road that will be constructed for access off of the existing road is flagged. (See Map B).
- e. Drainage: The road surface will be center crowned with ditches on each side of road. Slopes will have a maximum slope of 3:1.
- f. There will be no culverts placed in the ditchways during the drilling phase of operations. Further evaluation will be made for the additions of culverts if the road is to have long-term use.
- g. Surface materials (source): Surface materials will most likely not be required to be transported to the access road or drillpad for construction purposes. However, if gravel is required, the dirt contractor will be responsible for locating and permitting of any necessary construction material.

#### 3. Location of Existing Wells: (2 mile radius)

The proposed Helper State A-1 location is approximately 5500' southeast of the Helper Federal B-1

#### 4. Location of Tank Batteries and Production Facilities:

All permanent (on site for six months or longer) structures constructed or installed (including oil well pumpjacks) will be painted a flat, non-reflective, earthtone color to match the standard environmental colors, as determined by the Rocky Mountain 5-State Interagency Committee. This will include all facilities except those required to comply with O.S.H.A. (Occupational Safety and Health Act) regulations. These will be painted the color stipulated by O.S.H.A. All facilities will be painted within six months of installation.

Gas meter runs for each well, if needed, will be located within 500 feet of the wellhead. The gas flowline will be buried from the wellhead to the meter and 500 feet downstream of the meter run or any production facilities. Meter runs will be housed and/or fenced.

The oil and gas measurement facilities will be installed on the well location. The oil and gas meters will be calibrated in place prior to any deliveries. Test for meter accuracy will be conducted monthly for the first three months on new meter installations and at least quarterly thereafter. The State of Utah will be provided with a date and time for the initial meter calibration and all future meter proving schedules. A copy of the meter calibration reports will be submitted to State of Utah. All meter measurement facilities will conform with the API standards for liquid hydrocarbons and the AGA standard for natural gas measurement.

#### 5. Location and Type of Water Supply:

Water supply for drilling and completion purposes will be furnished by a water hauler.

Water supply will be obtained from either the Price River or from Willow Creek.

#### 6. Source of Construction Material:

Native material will be used for road surfacing and pad construction.

Should additional construction material be required, it will be the responsibility of the dirt contractor to locate and permit (if necessary) use of that material.

#### 7. Methods of Handling Waste Disposal

The reserve pit will be lined.

Produced waste water will be confined to a lined pit for a period not to exceed 90-days after initial production.

Trash will be confined in a covered container and hauled to an approved landfill. Burning of waste or oil is not approved, and spoil material will be kept on site for recontouring.

No bore holes will be used for disposal of waste materials. Human waste will be contained and will be disposed of at an approved sanitary landfill.

#### 8. Ancillary Facilities:

Not applicable for drilling operations in this area.

#### 9. Wellsite Layout:

A plat showing access to the well-pad and the location of the reserve pit are attached.

The location and access road will be cleared of trees prior to any construction. Stumps will be scattered or buried in an area designated by the State of Utah. Any stump left in place will be cut so that the stump height does not exceed 12 inches. All slash less than four inches in diameter will be chipped or scattered outside the cleared area and must be within 24 inches of the ground at all points. All material four inches in diameter or greater will be removed. All of the above will take place prior to placement of drilling facilities.

Topsoil and vegetation will be stripped together to a depth of 6 to 8 inches and stockpiled by wind-row on the northeast edge of the location. No topsoil stripping will be allowed when soils are moisture saturated to a depth of 3 inches, or frozen below the stripping depth.

The reserve pit will be fenced on three sides prior to drilling activity and closed off on the fourth side after drilling is finished. Fencing will be four strands of barbed wire or 48-inch woven wire with one strand of barbed wire above the woven wire. All corners will be braced with a wooden H-type brace. The fence construction will be on cut or undisturbed ground and the fence will be maintained in a livestock tight condition.

#### 10. Plans for Restoration of Surface:

The State of Utah will be notified at least 24-hours prior to commencing reclamation work.

Immediately upon completion of drilling, the location and surrounding area will be cleared of all debris, materials, trash, and junk not required for production.

Before any dirt work to restore the location takes place, the reserve pit must be completely dry and all cans, barrels, pipe, etc. will be removed.

If the well is a producer:

Unneeded areas of the location will be reclaimed as soon as the reserve pit has dried. Upgrade and maintain the access roads as necessary to prevent soil erosion and accommodate year-round traffic. Reshape areas unnecessary to operations, rip or disk on the contour, and seed all disturbed area outside the work area according to the seed mixture specified below. Save the topsoil for use during final reclamation unless the site can be recontoured to blend with the natural topography as required for final abandonment. Perennial vegetation must be established. Additional work will be required in case of seeding failures. All permanent facilities placed on the location will be painted to blend with the natural environment.

If the well is abandoned/dry hole:

Restore the access road and location to blend with the natural topography. During reclamation of the site, push the fill material into cuts and up over the backslope. Leave no depressions that will trap water or form ponds. Distribute topsoil evenly over the location and seed according to the above seed mixture. The access road and location will be ripped or disked prior to seeding.

Prepare seed-bed by contour cultivating four to six inches deep. Drill seed 1/2 to 1 inch deep following the contour. In areas that cannot be drilled, broadcast seed at 1.5 times the application rate and cover 1/2 to 1 inch deep with a harrow or drag-bar.

Fall seeding will be completed after September 1 and prior to ground frost. Spring seeding will be completed after the frost has left the ground and prior to June 1.

#### 11. Other Information:

There will be no deviation from the proposed drilling and/or workover program without prior approval. Safe drilling and operating practices must be observed.

"Sundry Notice and Report on Wells" will be filed for approval for all changes of plans and other operations.

The dirt contractor will be provided with an approved copy of the surface use plan.

An archaeology inspection will be performed by an authorized contractor. Their report on this inspection will be sent directly to the State of Utah.

The operator is responsible for informing all persons in the area who are associated with this project that they will be subject to prosecution for knowingly disturbing historic or archaeological sties, or for collecting artifacts or fossils. The Operator will immediately bring to the attention of the State of Utah any and all antiquities or other objects of historic or scientific interest including, but not limited to, historic or prehistoric ruins, artifacts, or fossils discovered as a result of operations under this permit. The operator will immediately suspend all activities in the area of the object and will leave such discoveries intact until told to proceed by the State of Utah. Notice to proceed will be based upon evaluation of the cultural significance of the object. Evaluation will be by a qualified professional. When not practical, the Operator will follow the mitigation requirements set forth by the State of Utah concerning protection, preservation, or disposition of any sites or material discovered. Within five working days the State of Utah will inform the Operator as to:

Whether materials appear eligible for the National Register of Historic Places;

the mitigation measure(s) the Operator will likely have to undertake before the site can be used (assuming in situ preservation is not necessary); and,

a time frame for the State of Utah to complete an expedited review to conform, through the State Historic Preservation Officer, that the findings are correct and that mitigation is appropriate.

If the Operator wishes, at any time, to relocate activities to avoid the expense of mitigation and/or the delays associated with this process, the State of Utah will assume responsibility for whatever recordation and stabilization of the exposed materials may be required. Otherwise, in those situations where the State of Utah determines that mitigation, data recovery and/or salvage excavations are necessary, the Operator will bear the cost. The State of Utah will provide technical and procedural guidelines for the conduct of mitigation. Upon verification from the State of Utah that the required mitigation has been completed, the Operator will then be allowed to resume construction.

#### 12. Lessee's or Operator's Representatives and Certification:

#### REPRESENTATIVE

Name:

Dave Winchester

Phone:

281/873-1280

Address:

Anadarko Petroleum Corporation

17001 Northchase Drive Houston, Texas 77060

#### **CERTIFICATION**

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drillsite and access route, that I am familiar with the conditions which currently exist, that the statements made in this plan are to the best of my knowledge, true and correct, and that the work associated with the operations proposed herein will be performed by

#### ANADARKO PETROLEUM CORPORATION

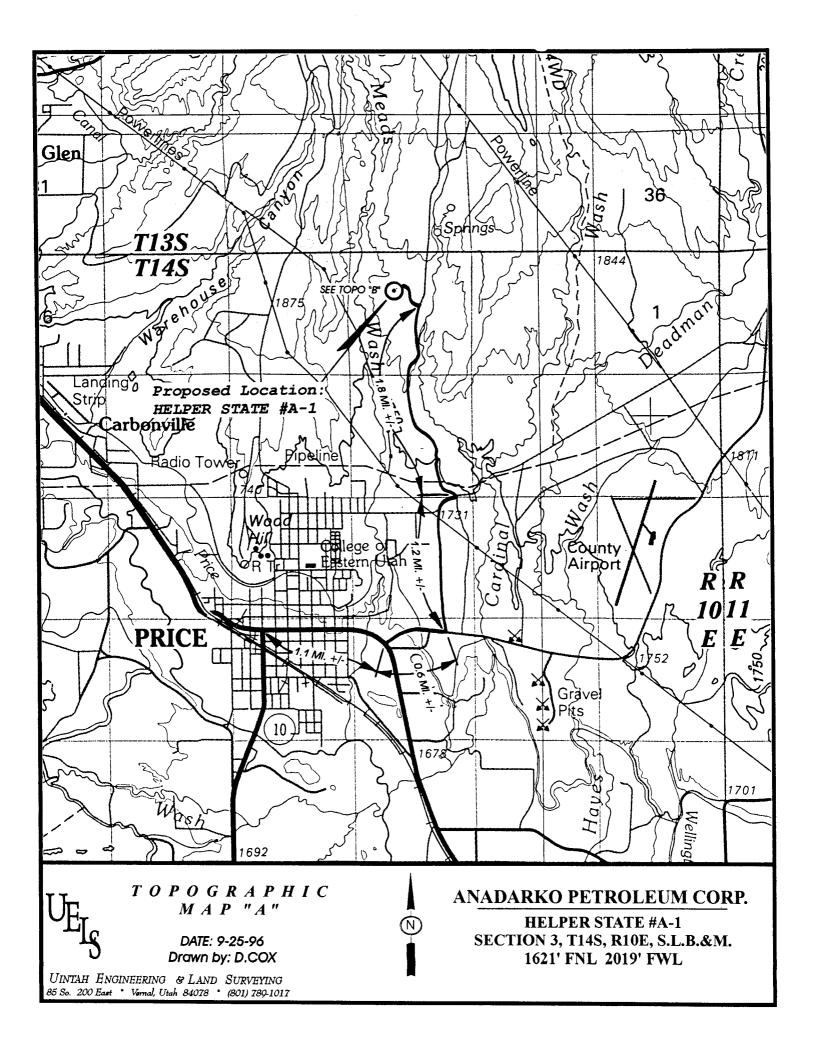
and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved.

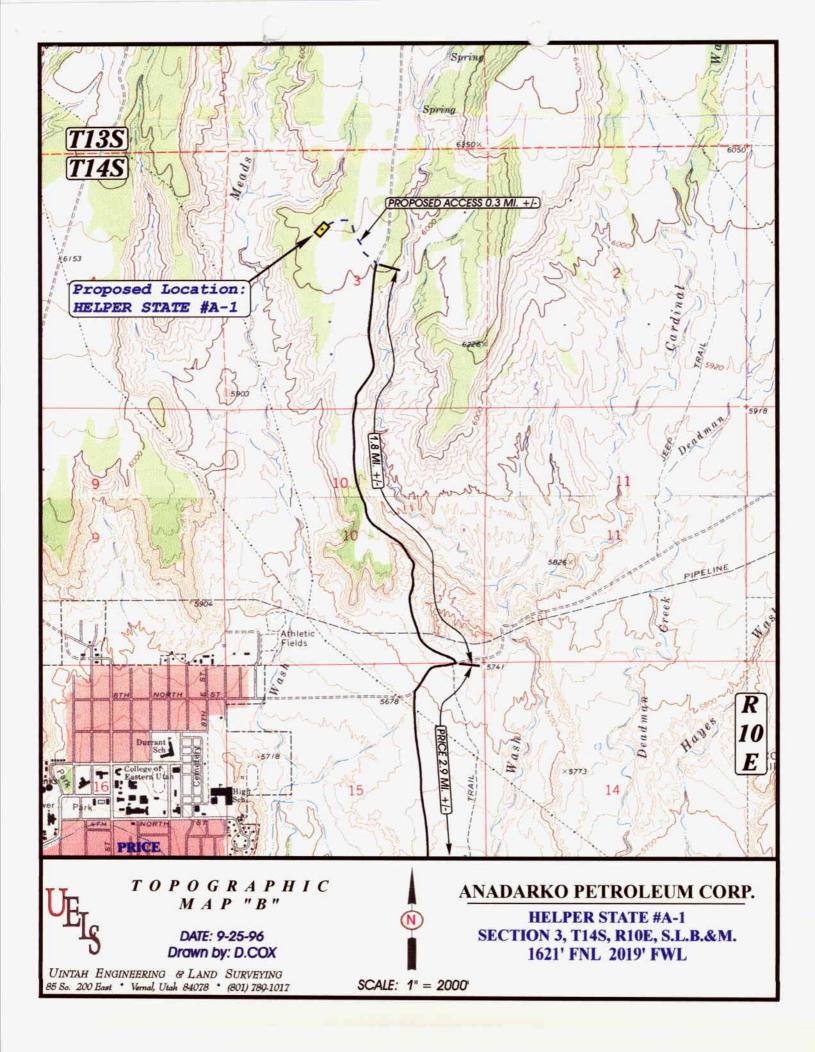
Date

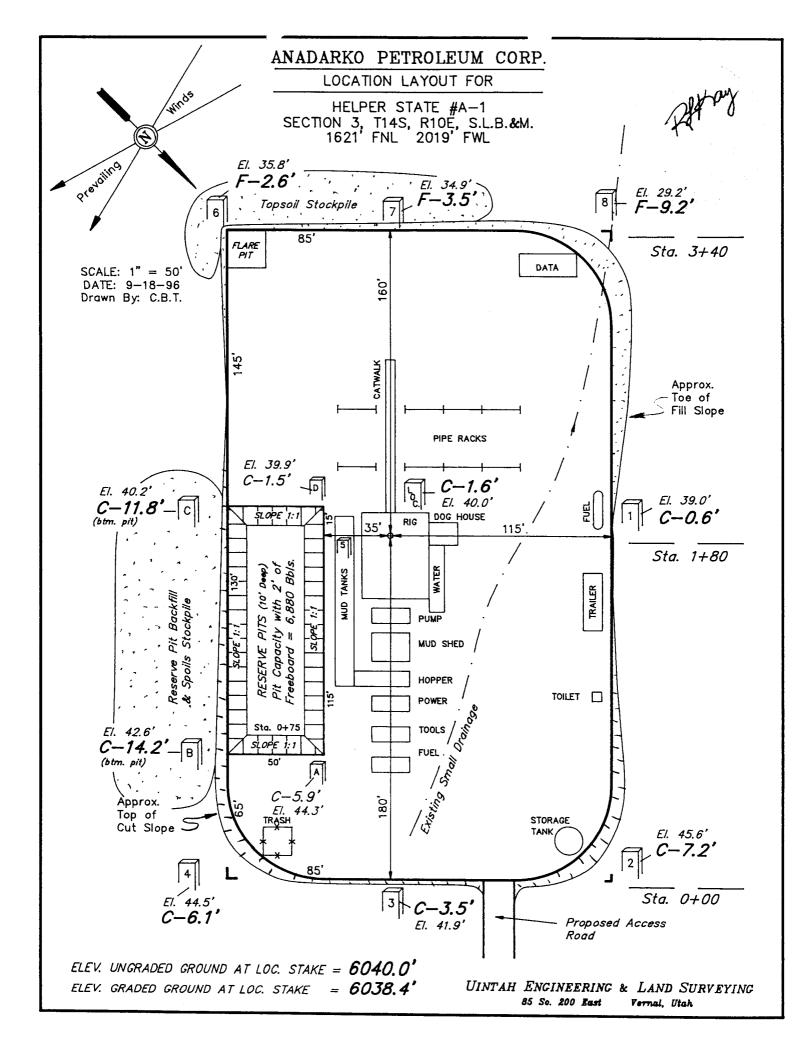
Dave Winchester

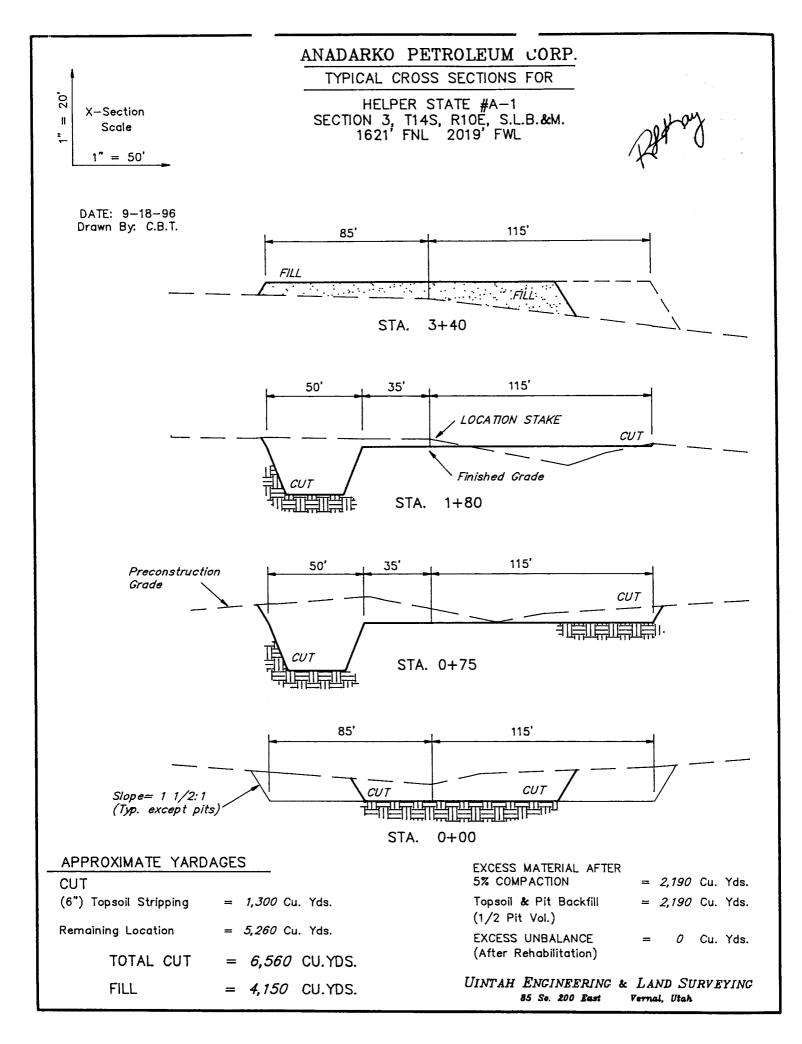
**Division Drilling Engineer** 

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## **MEMORANDUM**



## **Anadarko Petroleum Corporation Houston, Texas**

To: Mike Hebertson	Date: Wednesday, March 26, 1997
From: David H. Hudspeth - Staff Drlg. Eng.	CC: Winchester
Subject: APC-Permits To Drill	Pages to Follow: 1

The attached is a "Location Layout Schematic" showing the original location and the modified location size (dotted line). The new location size is 180' in width and 270' in length. Hopefully this with the revision of the "Surface Use Plan" will be adequate in obtaining APD's for the Birch and Helper wells.

Please advise if any questions or comments should arise. I can be reached at 281-874-8814 or by fax at 281-873-1326.

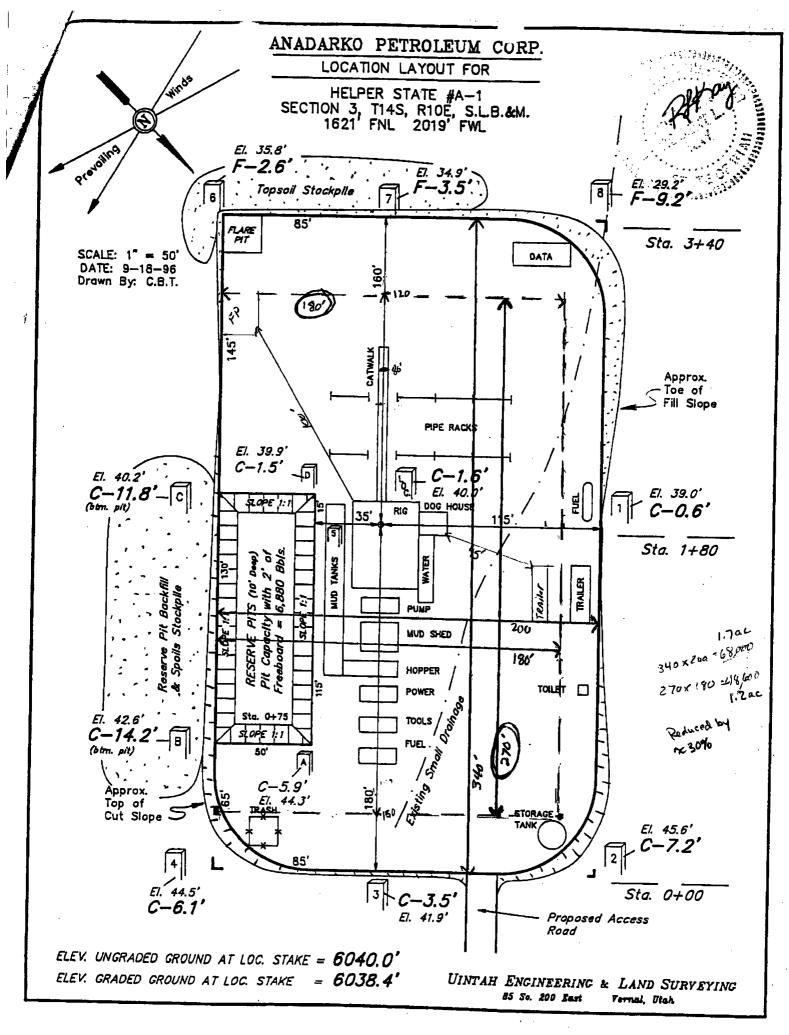
D.H.Hudspeth

dhh/dhh

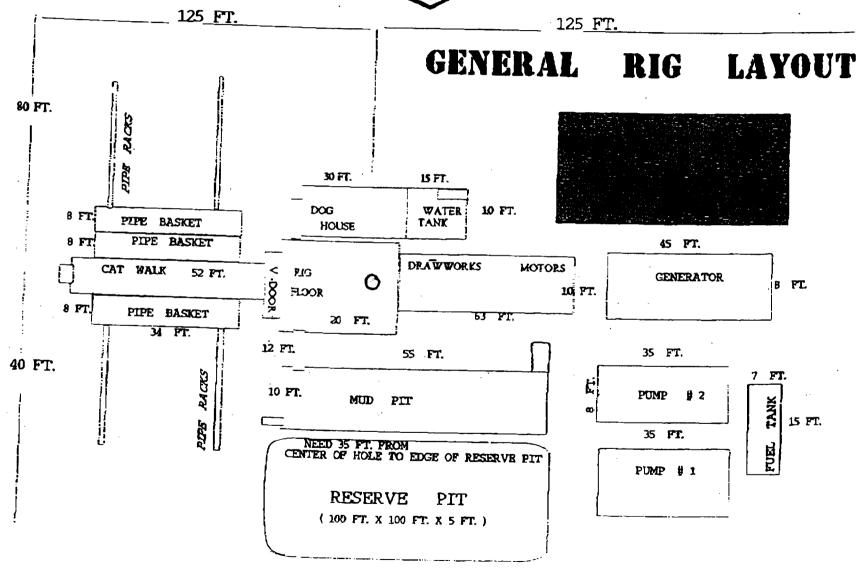
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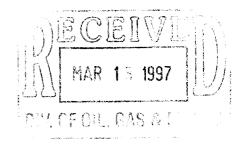




Michael O. Leavitt Governor Ted Stewart Executive Director Robert G. Valentine

1596 West North Temple Salt Lake City, Utah 84116-3195 801-538-4700 pert G. Valentine 801-538-4700 Division Director 801-538-4709 (Fax)

March 11, 1997



Jim Carter Director Utah Division of Oil, Gas, and Mining 1594 West North Temple Salt Lake City, Utah 84114-5801

ATTENTION: Michael Hebertson

Subject:

RDCC Agenda 3-11-97 Applications for 3 Permits to Drill--Carbon County

Action Item #21 Birch #A-1

Action Item #22 Anadarko Helper State A-1

Action Item #23 Helper State #D-7

#### Dear Jim:

Utah Division of Wildlife Resources has reviewed the subject drilling projects, all of which lie within critical and high-priority valued deer winter range. In order to lessen direct losses to winter range habitats, we recommend that well site development, pipeline right-of-way development, and road construction be limited to only what is absolutely needed for these three well sites. It is important to note that due to human disturbance between December 1 and April 15, habitats with in a 0.5 mile radius of wells and access roads are used far less by wintering big game than undisturbed areas, resulting in an indirect loss of habitat. Once the field is defined through drilling, a suitable transportation and pipeline right-of-way system can be designed.

Wildlife forage in many continuous stands of pinyon/juniper forest can benefit greatly from canopy removal and revegetation with an appropriate prescription. However, the limiting factor in this project area is thermal and hiding cover offered by the pinyon/juniper trees and/or forage offered by mature shrubs big enough to remain above snow fall. The large number of proposed well sites in this field with their associated pipeline right-of-way systems and road systems further increases the value and need for cover. Disturbed areas will need to be reseeded immediately following facility installation



Mr. Carter March 11, 1997 Page 2

The proposed transportation system shows more road development than is needed for these initial three wells and until the gas field is better defined there does not exist need for additional roads. There are several existing roads in the area that should be used before new roads are constructed. The power line right-of-way road should be used to cross the project area from east to west. Access to Helper State #D-7, should use the existing road north of Price or the power line right-of-way road. If feasible the road to Birch #A-1 should come in from the west.

Pipeline right-of-ways should parallel existing roads, which will lessen habitat impacts and facilitate ease in maintenance. If possible the pipeline from D-7 or the west side, to the processing point should wait until a need is established. We are concerned the pipeline to the processing point is being used to put in a new road. The proposed pipeline route is circuitous and joins the existing road nearly a mile south of the processing plant.

The pad sizes are almost twice the size of pads used by other companies and need to be kept to a minimum size. The possibility of using a larger sized pad and then reseeding immediately after rig removal was discussed during an onsite inspection on February 27. An onsite inspection of D-7 on March 11 showed that the pad is almost exclusively in mature shrubs, which are of critical importance to big game during winter periods. Translocating shrubs that are two years old or younger (older shrubs will not survive transplanting) from areas to be disturbed to nearby suitable sites may be of merit, since the value of reseeding as it relates to the shrub community would not be realized in these areas until they regrew to the mature state that is already found at the site.

We are concerned with the lack of plans on state lands to avoid, minimize and/or mitigate for impacts associated with development, maintenance, and operation of the well field. We would appreciate the opportunity to work with Anadarko in developing a mitigation plan. A mitigation proposal needs to be prepared addressing the following issues:

- Procedures designed to avoid or minimize disturbance to wintering big game between the period December 1 to April 15 as follows:
  - (1) Initial construction, road building, drilling, or other development activities associated with the wells should be completed outside the winter period.
  - (2) Routine maintenance work requiring heavy equipment should be completed outside the winter period.

Mr. Carter March 11, 1997 Page 3

- (3) Access roads to the wells need to be gated to restrict (we would prefer completely closed off) unauthorized vehicular access during the winter period.(4) Monitor, to the extent possible, producing wells using telemetry, which will reduce needed visits to the actual site during winter periods.
- Methodology and practices designed to compensate for long-term direct and indirect impacts to big game winter range habitat. For example translocation of individual mature browse plants that are situated in harms way. Additionally, a suitable amount of habitat must be enhanced to replace the habitat units directly and indirectly lost. This can be determined by HEP analysis, and typically requires 3 acres of enhancement for each impacted acre. This effort should include assessing use of raw water obtained from the wells or treating it to lessen dissolved solids in order for the company to sprinkler irrigate habitats proximal to well sites to enhance forage conditions and lure big game into disturbance areas they prefer not to use.
- Secure a sufficient reclamation bond, which should include the development of an reclamation plan that addresses sequential road closures, including an appropriate revegetation prescription for the areas interim and final reclamation, .

We appreciate the opportunity to review these gas well proposals and provide comments. Please coordinate with Bill Bates--Habitat Manager--or Ben Morris--Habitat Biologist--at our Southeastern Regional Office (801-637-3310) in Price, Utah.

Sincerely,

John Kimball
Acting Director

cc: Carolyn Wright, RDCC (Agenda 3-11-97, Items 21, 22, 23)



Michael O. Leavitt Governor David T. Terry Director 675 East 500 South, Suite 500 Salt Lake City, Utah 84102-2818 801-538-5100 801-355-0922 (Fax)

April 2, 1997

Via Facsimile 359-3940

Mr. James W. Carter, Director Utah Division of Oil, Gas & Mining 1594 West North Temple, Suite 1210 Salt Lake City, Utah 84114

Re: Applications for Permit to Drill -- Birch #A-1, Anadarko Helper State # A-1,

Helper State # D-7 Wells

Dear Jim:

The School & Institutional Trust Lands Administration (the "Trust Lands Administration") has obtained a copy of a March 11, 1997 letter to you from John Kimball, the Acting Director of the Utah Division of Wildlife Resources ("DWR"), concerning the above-referenced wells. In his letter, Mr. Kimball asks that the Division of Oil, Gas & Mining ("DOGM") limit wellsite development and associated activities in connection with the proposed wells, and require an extensive mitigation plan to address perceived impacts upon big game.

Two of the three proposed wells are located upon state school trust lands, and the third is located on federal lands. Under DOGM rule R649-3-34, surface impacts caused by oil and gas activities on state lands are governed by the requirements of the surface management agency, i.e the Trust Lands Administration. The limitations proposed by DWR go well beyond conditions that have traditionally been imposed by DOGM, and are arguably beyond DOGM's jurisdiction (particularly with regard to off-site actions and mitigation). We believe that it would be inappropriate for DOGM to impose any of the requested limitations without serious and substantive consultations with this agency.

The Trust Lands Administration is not averse to reasonable measures to protect wildlife in connection with mineral development on school trust lands. However, DWR has never at any point directly raised the concerns set forth in Mr. Kimball's letter with the Trust Lands Administration, and did not choose to inform us of the letter to DOGM. We request that DOGM refer DWR to this agency for resolution of this and any future surface use issues involving wildlife on trust lands. If DOGM does intend at any time to impose non-standard restrictions on oil & gas lessees of school trust lands, we would also appreciate the opportunity to comment.

Mr. James W. Carter April 2, 1997 Page -2-

Please feel free to call me at 538-5101 if you have any questions, and thank you for your assistance.

Sincerely yours,

David T. Terry

Director

cc: Ted Stewart

John Kimball

Anadarko Petroleum Corp.

Steve Ruhl\*

Steve Pearson\*

Craig Walters\*

#### RELEASE OF WELL LOCATION Unconventional Reservoirs

			Dat	e: <u>Jar</u>	uary 31. 19	197
Well Name: Help	er State A-1	AFE	No.:		15225	
Prospect or Field:	Helper-Price	<del></del> -				
County/State: Carb	on County, Utah					
Located on APC Acreage	e? <u>Yes</u>	APC Lease	No.:		-007-0093-0 of Utah ML-45	
Lease Expiration Date	or HBP/HBU: 3	/01/03				
Location: 1,621' FN	L & 2,019' FWL,	Section 3,	T14S-R	LOE, S.L	.B.&M.	
Brief Description of I	Drillsite or Uni	t Tract:	NW/4 01	Section	n 3	
*Formations Spaced or	Anticipated Spa	cing: Ant	icipate	160-ac	re spacing.	
Obligation Commencemen	nt Date (if any)	: ASAP.				
	0.5					
Depth Restrictions (ii	angel. Mose					
Operator: Anadarko	- · · · · ·		<b></b>			
Operator: Anadarko	100%			RI:	87.50% N/A	)
Operator: Anadarko  APC Interest: WI  * Surface Owner (Name Institutional Trust :  * Tenant (Name & Addr Surface Disturbance St	100%  Address): S  Lands Adm, 575 Eas  cess): State of c/o Scho	tate of Uta t 500 South Utah Fish ool and Ins	(OR h Fish a , Suite and Ga titutio	RI: nd Game I 500, Sal me Depar nal Trus	N/A Department, S t Lake City, etment t Lands Adm	chool and UT 84102
Operator: Anadarko  APC Interest: WI  * Surface Owner (Name Institutional Trust :  * Tenant (Name & Addr	100%  a & Address): S Lands Adm, 675 Eas  cess): State of c/o Scho  cipulations, Ease hall conduct deta the lookout for	tate of Uta t 500 South Utah Fish ool and Ins ments, Etc ailed surfa	(OR h Fish a , Suite and Ga titutio	RI:  nd Game I 500, Sal  me Depar nal Trus	N/A Department, S t Lake City, Thment t Lands Adm	chool and UT 84102
Operator: Anadarko  APC Interest: WI  * Surface Owner (Name Institutional Trust )  * Tenant (Name & Addr Surface Disturbance St Production group sh location and be on activity among other	100%  a & Address): S Lands Adm, 675 Eas  cess): State of c/o Scho  cipulations, Ease hall conduct deta the lookout for	tate of Uta t 500 South Utah Fish col and Ins ments, Etc ailed surfa possible r existing ea Opinion da	(OR h Fish a , Suite and Ga titutio .: ce insp ights-c sements .: ted Jan , prep	RI:  nd Game I 500, Sal  me Depar nal Trus  ection I of-way, I and R-0  uary 15, ared by	N/A Department, St Lake City, Ethent Et Lands Adm Derior to businesservoirs a D-W's on Ext	School and UT 84102 ilding th and minim mibit "B"
Operator: Anadarko  APC Interest: WI  Surface Owner (Name Institutional Trust:  Tenant (Name & Addr  Surface Disturbance St Production group sh location and be on activity among other  Title Information:	100%  A & Address): State of c/o School Conduct detail conduct detail the lookout for things. See of Drilling Title of Utah Lease	tate of Uta t 500 South Utah Fish col and Ins ments, Etc ailed surfa possible r existing ea Opinion da mL-45805	(OR h Fish a , Suite and Ga titutio .: ice insprights-co seements ited Jan , prepa	nd Game I 500, Sal me Depar nal Trus ection I of-way, I and R-0 uary 15, ared by er, CO.	N/A Department, St Lake City, Ethent Et Lands Adm Derior to businesservoirs a D-W's on Ext	chool and UT 84102 Iding th and minin abit "B" ring Stat
Operator: Anadarko  APC Interest: WI  Surface Owner (Name Institutional Trust:  Tenant (Name & Address: Address: Address: Address: Title Information:  Comments:	100%  A & Address): State of c/o School Conduct detail conduct detail the lookout for things. See of Drilling Title of Utah Lease	tate of Uta t 500 South Utah Fish col and Ins ments, Etc ailed surfa possible r existing ea Opinion da mL-45805	(OR h Fish a , Suite and Ga titutio .: ice insprights-co seements ited Jan , prepa	nd Game I 500, Sal me Depar nal Trus ection I of-way, I and R-0 uary 15, ared by er, CO.	N/A Department, St Lake City, Ethent Et Lands Adm Department St Lands Adm Department Department St Lands Adm Department Dep	chool and UT 84102 Iding th and minin abit "B" ring Stat
Operator: Anadarko  APC Interest: WI  * Surface Owner (Name Institutional Trust:  * Tenant (Name & Addr  Surface Disturbance St  Production group sh location and be on	100%  A & Address): State of c/o School Conduct detail conduct detail the lookout for things. See of Drilling Title of Utah Lease	tate of Uta t 500 South Utah Fish col and Ins ments, Etc ailed surfa possible r existing ea Opinion da mL-45805	(OR h Fish a , Suite and Ga titutio .: ce insp ights-c sements ted Jan , prep n, Denv	RI:  nd Game I 500, Sal  me Depar  nal Trus  pection p f-way, 1 and R-0  uary 15, ared by er, CO.	N/A Department, St Lake City, It Lake City, It Lands Adm Department It Lands Adm Department Outlier to builties and the control of the control It Lands Adm Department, St Lands Adm Department Depart	School and UT 84102 Ilding the and mining wibit "B" ring Stat

Manager - Land Administration\*\*

Land Unit File\*

Supervisor - Joint Int. Acc'ting\*\*

#### FAX TRANSMITTAL

April 11, 1997

Mr. David Hudspeth Anadarko Petroleum Corporation

As we discussed during our telephone conversation this morning, I am sending you information concerning the requirements for justifying exceptions to the well siting rules of the Division of Oil, Gas and Mining. I have attached a copy of referenced rule.

Rule no. R-649-3-3 requires that a written application for an exception well location which includes several items. But the most critical requirement is the written consent from owners affected by the exception. Obviously, if ownership is the same for all surrounding acreage, then the exception justification is very simple.

For the three wells currently being processed for drilling permit approval, I am including a copy of this correspondence in the file. From your statements in our telephone conversation, I will accept that Anadarko owns the mineral rights in all of Sections 3, 4 and 5 of Township 14 South, Range 10 East in Carbon County. You should still submit to the Division a written statement to this effect in order to comply with the requirements of the rule.

Thank you for your response to my questions. Please let me know if I can be of any help to you. My telephone number is (801) 538-5334 and my fax number is (801) 359-3940.

John Baza
Petroleum Engineer
Utah Division of Oil, Gas and Mining

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John Baza Petroleum Engineer Utah Division of Oil, Gas and Mining

APR. 9.1997 9:59AM APC—HOU. DIV. DRLG.		NO.788 P.2/4
FORM 8 STATE OF UTAH DIVISION OF OIL, GAS AND MI	INING	5. Lease Designation and Serial Number ML 45805
SUNDRY NOTICES AND REPORTS C		8. Indian, Allottee or Tribe Name:
Do not use this form for proposals to drill new wells, deepen existing wells, or to Use APPLICATION FOR PERMIT TO DRILL, OR DEEPEN for	o reenter plugged and abandoned wells, im for such purposes	7. Unit Agreement Name:
1. Type of Well: OIL GAS OTHER:	COALBED METHANE	B. Well Name and Number: Helper State A-1
2. Name of Operator  Anadarko Petroleum Corporation		9. API Well Number:
3. Address and Telephone Number.  17001 Northchase Dr., Houston, Texas 77060	281-874-8814	10. Fleid and Pool, or Wildoat Helper CBM
4. Location of Well Footages: 1621 FNL & 2019 FWL, NW SEC QQ.Sec., T., R., M.:		county: Carbon State: Utah
11. CHECK APPROPRIATE BOXES TO INDICATE NATIONAL NOTICE OF INTENT	TURE OF NOTICE, REPORT, OR OT	HER DATA
Abandon New Construction Repair Casing Pull or Alter Casing Change of Plans Recomplete Convert to Injection Reperforate Fracture Treat or Acidize Vent or Flare Multiple Completion Water Shut-Off X Other Location Exception	Abandon*  Repair Casing Change of Plans Convert to Injection Fracture Treat or Acidize Other  Date of work completion	New Construction Pull or Alter Casing Reperforate Vent or Flare Water Shut-Off
Approximate date work will etartApr17, 1997	Report results of Multiple Completions and Rec COMPLETION OR RECOMPLETION REPORT AND L Must be accompanied by a cement vertication re	.OG form.
DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pedinent details, and control depths for all markers and zones pertinent to this work.)  The subject well is proposed as stated above due to considerations. We feel this will increase the charconjunction of reducing any surface damages.	mana Carres 17 de	

Title Staff Drilling Engineer

Date April 8. 1997

David H. Hudspeth

13,

Name & Signature

(This space for State use only)

#### STATE ACTIONS

Mail to: RDCC Coordinator 116 State Capitol Salt Lake City, Utah 84114

1.	ADMINISTERING STATE AGENCY OIL, GAS AND MINING 1594 West North Temple, Suite 1210	2. STATE APPLICATION II  (assigned by State Cle	
	P.O. Box 145801 Salt Lake City, Utah 84114-5801	3. APPROXIMATE DATE P Upon Approx	
4.	AREAWIDE CLEARING HOUSE(s) RECEIV (to be sent out by agency in block 1) Five County Association of Governments	VING STATE ACTIONS:	
5.	TYPE OF ACTION: /_/ Lease /X/ Permit /_/ Land Sale /_/ Land Ex	/_/ License /_/ Land Acquisition change /_/ Other	
6.	TITLE OF PROPOSED ACTION: Application for Permit to Drill		
7.	DESCRIPTION: Anadarko Petroleum Corporation proposes to Carbon County, Utah. This action is being prointerests. The Division of Oil, Gas and Minin approval before operations commence.	esented to RDCC for consideration of	of resourceissues affecting state
8.	LAND AFFECTED (site location map required SE/4, NW/4, Section 3, Township 14 South, R		
9.	HAS THE LOCAL GOVERNMENT(s) BEEN	CONTACTED?	
10.	POSSIBLE SIGNIFICANT IMPACTS LIKELY Degree of impact is based on the discovery of o		
11.	NAME AND PHONE NUMBER OF DIS' PROJECT SITE, IF APPLICABLE:	TRICT REPRESENTATIVE FROI	M YOUR AGENCY NEAR
12.	FOR FURTHER INFORMATION, CONTACT	Γ: 13. SIGNATURE AND TITLE ( OFFICIAL:	OF AUTHORIZED
	R. J. Firth PHONE: 538-5274	DATE: 2-19-97	Associate Director

## WORKSHEET APPLICATION FOR PERMIT TO DRILL

APD RECEIVED: 01/17/97	API NO. ASSIGNED: 43-007-30349
WELL NAME: <u>HELPER STATE A-1</u> OPERATOR: <u>ANADARKO PETROLEUM CORP</u>	(N0035)
PROPOSED LOCATION: SENW 03 - T14S - R10E SURFACE: 1621-FNL-2019-FWL BOTTOM: 1621-FNL-2019-FWL CARBON COUNTY UNDESIGNATED FIELD (002)  LEASE TYPE: STA LEASE NUMBER: ML-45805  PROPOSED PRODUCING FORMATION: FRSD	INSPECT LOCATION BY: // TECH REVIEW Initials Date Engineering Geology Surface
RECEIVED AND/OR REVIEWED:	LOCATION AND SITING:  R649-2-3. Unit: R649-3-2. General.  R649-3-3. Exception.  Drilling Unit.  Board Cause no: Date:
COMMENTS: <u>CASING</u> OFSIGN OK  STIPULATIONS:	

## DIVISION OF OIL, GAS AND MINING APPLICATION FOR PERMIT TO DRILL STATEMENT OF BASIS

Operator Name: Anadarko Petroleum Corp
Name & Number: Helper State A - 1
API Number: 43 - 007 - 30349
Location: 1/4,1/4 <u>SENW</u> Sec. <u>3</u> T. <u>14 S</u> R. <u>10 E</u>
Geology/Ground Water:
A minor aquifer may be encountered close to the surface. Two active springs which are closely
subjacent to the pediment mantle, the lower of which is close to the same topographic contour as the
oad, are about 0.5 miles northeast in a tributary to Cardinal Wash. Garley Canyon Sandstone Reds of
the Blue Gate Shale Member of the Mancos Shale thin or pinch out nearby so they should not present.
a significant ground water resource. The proposed casing and cement program should adequately
solate any zones of water penetrated.
Reviewer: Christopher Kierst and K. Michael Hebertson Date: 3/6/97
Surface:
A highly permeable soil and possible ground water resource militates the need for the protection of a
ined pit. Precipitation will be deflected around the location with berms and culverts. There are no
<u>learby culinary or irrigation water supply wells. Provision was made to ensure site rehabilitation, litter</u>
and waste control, preservation of drainage patterns and the integrity of local infrastructure
groundwater and other resources. Power lines and gathering systems will follow access roads. No
104 dredge and fill permit is deemed needed for operations directly associated with this location. No
lashilood nazard is evident in the area of the location. Inclement weather and snow cover
<u>lecessitated the use of past experience in similar settings as a substitute for visual characterization of </u>
ome environmental parameters at the location. This Statement of Basis reflects a level of confidence

Reviewer: Christopher Kierst and K. Michael Hebertson

**Date**: 3/5/97

## Conditions of Approval/Application for Permit to Drill:

1. Recommend culverts sufficient to manage expected runoff, standing and surface water in crossed drainages.

commensurate with the conditions at the time of the presite. The Division received comments from the

Division of Wildlife Resources (DWR) by letter dated March 11, 1997. They revealed in the letter several concerns, recommendations and proposals the nature of which largely go beyond what this Division currently views as permissible for including as drilling permit stipulations. Comments were also received from SITLA concerning and in response to DWR's concerns encouraging the Division not to

impose excessive requirements related to wildlife and other surface activities on the applicant.

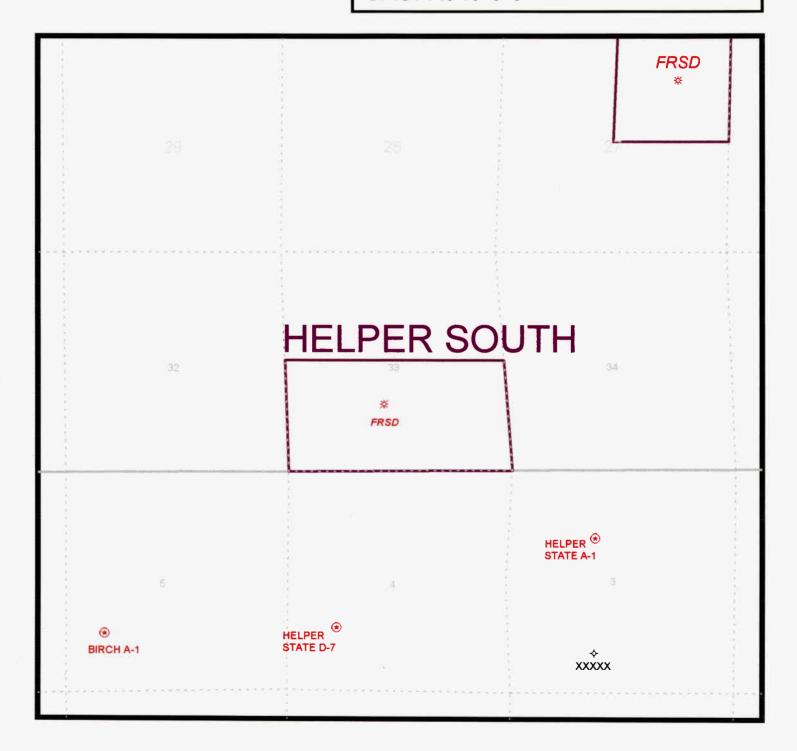
- 2. Berm location and pit.
- 3. Site infrastructure as per modified drilling location plat.
- 4. Minimum 12 mil synthetic lined pit.
- 5. Soil storage as per modified drilling location plat.
- 6. Reclaim unnecessary road segments created by more directly accessing location facilitate ingress while preserving road net, as per SITLA.

**OPERATOR: ANADARKO** 

FIELD: UNDESIGNATED (002) SECTION: 3,4,5, T14S, R10E

**COUNTY: CARBON** 

UAC: R649-3-3



PREPARED:

**DATE: 21-JAN-97** 

### ON-SITE PREDRILL EVALUATION

## Division of Oil, Gas and Mining

OPERATOR: Anadarko
WELL NAME & NUMBER: Helper State A - 1
API NUMBER: 43-007-30349
LEASE: State of Utah ML - 45805 FIELD/UNIT: Wildcat
LOCATION: 1/4,1/4 SENW Sec: 3 TWP: 14S RNG: 10E 1621 FNL 2019 FWL
LEGAL WELL SITING: 460 F SEC. LINE; F 1/4,1/4 LINE; 920 F ANOTHER WELL.
GPS COORD (UTM): x = ; y =
SURFACE OWNER: State of Utah
M. Hebertson, C. Kierst, Jeff Duncan (Anadarko), Steve Gray (TN Construction), David Kay (Uintah Engineering) and Ben Morris (DWR).  SITLA land managers were consulted but were unable to attend the presite.
REGIONAL/LOCAL SETTING & TOPOGRAPHY  Western margin of Colorado Plateau/~4 miles South of the Tavaputs  Plateau and 4 miles south of the 1000-1500' Book Cliffs. Location is  on pediment mantle which is Quaternary in age. Shallow canyons (1-  200' deep) incise pediment slopes forming benches north and east of  Price, UT, below the Book Cliffs. Pediment gently slopes south.  Location is on wooded, gently rolling ground.
SURFACE USE PLAN
CURRENT SURFACE USE: Grazing and wildlife habitat
PROPOSED SURFACE DISTURBANCE: 340' X 300' pad with 130' X 50' X 10' pit included as part of the location. 0.3 miles of approach road and upgrades needed. Spoils and topsoil stockpiles and reserve pit backfill pile will be stored outboard of the pad.
LOCATION OF EXISTING WELLS WITHIN A 1 MILE RADIUS: None
LOCATION OF PRODUCTION FACILITIES AND PIPELINES: Powerline and gathering system follow approach road.
SOURCE OF CONSTRUCTION MATERIAL: <u>Native material will be used to</u>

gravel approach road and location. Any additional material will be acquired from TN Construction sources.

ANCILLARY FACILITIES: None

#### WASTE MANAGEMENT PLAN:

Portable toilets; garbage cans on location will be emptied into centralized dumpsters which will be emptied into an approved landfill. Reserve pit will be dried after use and then buried.

Water produced during testing and completion will be stored in a lined temporary reserve pit and disposed of by injection, reverse osmosis or evaporation.

#### ENVIRONMENTAL PARAMETERS

AFFECTED FLOODPLAINS AND/OR WETLANDS: Price Canal is ~2.5 miles southwest. Price River is 3 miles southwest. State Division of Water Rights personnel (Mark Page of Price, UT-?) should be included in activities and planning to clear areas for compliance with 404 Dredge and Fill Permit requirements.

FLORA/FAUNA: Pinyon, juniper, sagebrush, indian rice grass, broom snakeweed, winterfat, greasewood, shadscale, blue gramma, dryland sedge, elymus species, salina wild rye, cactus, / birds, coyotes, rodents, golden eagle nests, elk and deer, reptiles. Inclement weather and snow cover necessitated the use of past experience in similar environments as a substitute for visual characterization of the flora / fauna at this location. See Comment 15.

SOIL TYPE AND CHARACTERISTICS: <u>Sandy</u>, <u>cobbled</u>, <u>highly-permeable soil</u> of the <u>Quaternary pediment mantle which overlies the existing Blue</u>

<u>Gate Shale member of the Cretaceous Mancos Shale</u>. <u>Inclement weather</u>

<u>and snow cover necessitated the use of existing mapping and past</u>

<u>experience in similar geologic settings as a substitute for visual</u>

<u>characterization of the soil permeability at this location</u>. <u>See</u>

<u>Comment 15</u>. (GM)

SURFACE FORMATION & CHARACTERISTICS: Quaternary pediment mantle.

Light brown, brown, gray or reddish brown, unconsolidated, massivebedded sediments consisting of silts, sands, pebbles, boulders, and
cobbles in a poorly sorted mixture. Inclement weather and snow cover
necessitated the use of existing mapping and past experience in
similar geologic settings as a substitute for visual characterization
of the surficial geology at the location. See Comment 15.

EROSION/SEDIMENTATION/STABILITY: Stable ground with no undermining, flowage or upheaval evident locally. Erosion is limited to minor dry washes during cloudbursts, high winds and periods of rapid snowmelt with sedimentation occurring during the wane of these episodes.

PALEONTOLOGICAL POTENTIAL: Paleontologists at UGS know of no fossil resource at any of the sites as quoted to them by 1/4 1/4 1/4 (pursuant to request on 3/7/97, pers. comm. via voicemail w/ Martha Hayden of UGS, 3/10/97). Inclement weather and snow cover necessitated the use of existing mapping and past experience in similar geologic settings as a substitute for visual characterization of the paleontology at the location. See Comment 15.

#### RESERVE PIT

CHARACTERISTICS: 130' X 50' X 10' excavated pit bermed to deflect runoff.

LINER REQUIREMENTS (Site Ranking Form attached): Minimum 12 mil synthetic liner

#### SURFACE RESTORATION/RECLAMATION PLAN

Site will be restored to SITLA standards upon abandonment.

SURFACE AGREEMENT: As per mineral lease ML-45804 with the State of Utah.

CULTURAL RESOURCES/ARCHAEOLOGY: Cleared and on-file.

#### OTHER OBSERVATIONS/COMMENTS

<u>Items discussed included: 1) Increasing the scope of the information</u> presented in association with future APD's when APD's are part of a larger project with much larger infrastructure plan. 2) Need for <u>crossover roads. 3) Need for large pads. 4) Location of power lines and</u> \_ gathering system. 5) Need for consultation with affected <u>municipalities. 6) Reclamation of unnecessary road segments of</u> existing two-track jeep trails created by more directly accessing location. 7) Minimizing access road sinuousity and spurrious loops 8) Startups after April 15, 1997 as per DWR 9) Drilling restrictions <u>after December 1, 1997 as per DWR. 10) Investigate the use of existing</u> <u>access roads. 11) Need to properly draft the APD documentation to DOGM</u> <u>rather than BLM when the locations are on state leases 12) Need to</u> exlicitly state the source of the water supply. 13)All wells not sited within an approved state 40 acre location will require an exception to location and siting request. 14) Area is critical elk and deer winter range according to DWR. 15) The characterizations of the <u>several environmental parameters presented in this document should be</u> employed with a degree of caution commensurate with the conditions at the time of the presite.

#### ATTACHMENTS:

K. Michael Hebertson and Christopher Kierst

DOGM REPRESENTATIVE

2/27/97 PM DATE/TIME

## Evaluation Ranking Criteria and Ranking Score For Reserve and Onsite Pit Liner Requirements

Site-Specific Factors		Ranking	Site Ranking
Distance to Groundwater (feet)			
>200	0		
100 to 200	5		
75 to 100	10		
25 to 75	15 20		20
<25 or recharge area	20		
Distance to Surf. Water (feet)			
>1000	0		
300 to 1000	2		
200 to 300	10		
100 to 200 < 100	15 20		0
2 100	20		
Distance to Nearest Municipal Well	(feet)		
>5280	0		
1320 to 5280	5		
500 to 1320	10		^
<500	15		
Distance to Other Wells (feet)			
>1320	0		
300 to 1320	10		
<300	20		
Native Soil Type			
Low permeability	0		
Mod. permeability	10		
High permeability	20		20
mluid muus			
Fluid Type Air/mist	0		
Fresh Water	0 5		
TDS >5000 and <10000	15		
TDS >10000 or Oil Base	20		
Mud Fluid containing high			
levels of hazardous constituer	nts		_ 0
Drill Cuttings			
Drill Cuttings Normal Rock	0		
Salt or detrimental	10		0
bare of accrimental	10		
Annual Precipitation (inches)			
<10	0		
10 to 20	5		<b></b>
>20	10		_5
Affected Populations			
<10	0		
10 to 30	6		
30 to 50	8		
>50	10		0
Presence of Nearby Utility			
Conduits			
Not Present	0		
Unknown	10		
Present	<b>1</b> 5		_0
Final Score (Level I Sensitivity)			_45
(DOINTELVILLY)			_ +

David Hudspeth (281) 874-8814 fax (281) 873-1326

- According to the information which he has, Anadarko Controls all acreage in Sections 3, 4, and 5 of T.14S, R.10E., Carbon Co.
- I instructed him to send in a document which states their ownership and I will approve the APD on that basis.

QMPAD DAGMA

## Anadarko - Helper State D-7 Also, Helper State A-1 Casing Evaluation

Production casing:

Max mud wt = 10.0 ppg (estimated)

BUP = (10 X0.052 X 2700)

= 1404 psi

Burst str. of 51/2", 17#, K-55 = 5,320 psi

Burst S.F. =  $\frac{5320}{1404} = 3.79$ 

Collapse str. of 51/2", 17#, K-55 = 4910

Collapse SF = 4910 = 3.50

Weight of string = (17 / 2700) = 45,900

St. str. of 51/2", 17#, K-55, STC = 252,000

Tension SF =  $\frac{252,000}{45,900} = 549$ 

Michael O. Leavitt Governor Ted Stewart Executive Director James W. Carter Bivision Director 801-359-3940 (Fax) 801-538-7223 (TDD)

1594 West North Temple, Suite 1210 Box 145801 Salt Lake City, Utah 84114-5801 801-538-5340 801-359-3940 (Fax)

April 17, 1997

Anadarko Petroleum Corporation 17001 Northchase Drive Houston, Texas 77060

Re: Helper State A-1 Well, 1621' FNL, 2019' FWL, T. 14 S., R. 10 E., Carbon County, Utah

Gentlemen:

Pursuant to the provisions and requirements of Utah Code Ann. 40-6-1 et seq., Utah Administrative Code R649-3-1 et seq., and the attached Conditions of Approval, approval to drill the referenced well is granted.

This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date. API identification number assigned to this well is 43-007-30349.

Sincerely,

Lowell P. Braxton

Deputy Director

lwp

Enclosures

Carbon County Assessor

Bureau of Land Management, Moab District Office

Operator: _		Anadarko Petroleum Corporation										
Well Name &	Number: _	Helpe	er Stat	ce A-1								
API Number:		43-00	07-3034	19								
Lease:		ML-45	805									
Location	SE NW	Sec	3	ηr	14 S	Ð	10 F					

### Conditions of Approval

#### 1. General

Compliance with the requirements of Utah Admin. R. 649-1 et seq., the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for Permit to Drill.

### 2. Notification Requirements

Notify the Division within 24 hours following spudding the well or commencing drilling operations. Contact Jimmie Thompson at (801)538-5336.

Notify the Division prior to commencing operations to plug and abandon the well. Contact John R. Baza (801)538-5334 or Mike Hebertson at (801) 538-5333.

### 3. Reporting Requirements

All required reports, forms and submittals shall be promptly filed with the Division, including but not limited to the Entity Action Form (Form 6), Report of Water Encountered During Drilling (Form 7), Weekly Progress Reports for drilling and completion operations, and Sundry Notices and Reports on Wells requesting approval of change of plans or other operational actions.

4. Compliance with the Conditions of Approval/Application for Permit to Drill outlined in the Statement of Basis dated March 6, 1997 (copy attached).

## DIVISION OF OIL, GAS AND MINING

## SPUDDING INFORMATION

Name of Company: <u>ANADARKO PETROLEUM CORP.</u>
Well Name: <u>HELPER STATE A-1</u>
Api No. <u>43-007-30349</u>
Section: 3 Township: 14S Range: 10E County: CARBON
Drilling Contractor AZTEC
Rig # <u>184</u>
SPUDDED:
Date <u>4/21/97</u>
Time
How ROTARY
Drilling will commence
Reported by <u>HARLEN COLLIER</u>
Telephone # <u>1-801-636-9000</u>
Date:

FORM 9	STATE OF UTAH IVISION OF OIL, GAS AND MIN	NING	5. Lease Designation and Serial Number ML 45805
SUNDF	RY NOTICES AND REPORTS O	N WELLS	6. Indian, Allottee or Tribe Name:
Do not use this form for proposals Use APPLICA	s to drill new wells, deepen existing wells, or to TION FOR PERMIT TO DRILL OR DEEPEN for	o reenter plugged and abandoned wells. m for such purposes	7. Unit Agreement Name:
1. Type of Well: OIL GAS	OTHER:	COALBED METHANE	8. Well Name and Number: Helper State A-1
2. Name of Operator			9. API Well Number:
Anadarko Petroleum Co	rporation		10. Field and Pool, or Wildcat
Address and Telephone Number.			Helper CBM
17001 Northchase Dr.,	Houston, Texas 77060	281-874-8814	
4. Location of Well Footages: 1621 F	FNL & 2019 FWL, NW Sec 3,	, T14S, R10E	County: Carbon
QQ,Sec., T., R., M.:			State: Utah
11 CHECK APPROP	PRIATE BOXES TO INDICATE NA	ATURE OF NOTICE, REPORT, OR O	THER DATA
NOTIC	E OF INTENT	SUBSEQUENT (Submit Original	REPORT
(Subm	it in Duplicate)	(Submit Original	
Abandon	New Construction	Abandon*	New Construction
Repair Casing	Pull or Alter Casing	Repair Casing	Pull or Alter Casing
Change of Plans	Recomplete	Change of Plans	Reperforate
Convert to Injection	Reperforate	Convert to Injection	
Fracture Treat or Acidize	Vent or Flare	Fracture Treat or Acidize	Water Shut−Off
Multiple Completion	Water Shut-Off	Other	
X Other Lo	ncation Exception		
	<u> </u>	Date of work completion	
Approximate date work will star	April, 1997	Report results of <b>Multiple Completions</b> and <b>F</b> COMPLETION OR RECOMPLETION REPORT AN	t <b>ecompletions</b> to different reservoirs on WELL D LOG form.
		Must be accompanied by a cement verification	report.
DESCRIBE PROPOSED OR COMPLETED     vertical depths for all markers and zone	O OPERATIONS (Clearly state all pertinent details, are pertinent to this work.)	nd give perlinent dates. If well is directionally drilled	give subsurface locations and measured and true
The subject well is n	managed as stated above due	to more favorable "Topographic	~ & Geologic"
ine subject well is p	fool this will increase the c	hances of drilling and complet	ting a successful well in
considerations. We i	ing any surface damages.	ridinees of diffing and compres	5533355
conjunction of reduct	ing diff sai ruce damages.		
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		1154	APR 2 4 1997
		111//	APR 24 1531
		الات	
		DIV.	OF OIL, GAS & MINING
M	ludon ot b		
David H. H		aff Drilling Engineer	Date April 8, 1997
Name & Signature	itle St	with Districting Englished	Date

(This space for State use only)

(3/89)

OPERATOR Anadarko Petroleum Corporation

OPERATOR ACCT. NO. N 0035

ADDRESS 17001 Northchase Drive

DIV. OF OIL, GAS & MINING

Houston, Texas 77060

CODE	CURRENT	NEW	API NUNBER	WELL NAME			WELL	LOCATION	l	Chin	CCCCCC
CODE	ENTLIY NO.	ENTITY NO.			QQ	SC	TP	RG	COUNTY	SPUD DATE	EFFECTIVE DATE
A	99999	12/22	43-007-30349		NW	3	14S	10E	Carbon	04/25/97	04/25/9
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LL 5 CO	OMMENTS:						<u>i.                                    </u>			<u>                                     </u>	
								•			
TION CÓ	DES (See in	etructions	on back of form)		····						
A -	Establish	new entity	for new well (sing	gle well only)		กกร	NEC.	$\overline{a}$	All.	6	
l ~	- Ke-assiun.	well trom o	ing entity (group	u to another evicting entituill	)ECI		E	///	Signature	G F /	
() →	- Ke-assion	well from o	ne existing entity ments section)	to a new entity	$\langle \langle     \rangle$			] ]]	Staff Dril	ling Eng.	09.May.
					YAM ///	13 199	37    <u> </u>	]]]	Title		Date
it: Us	e CUMMENT S	ection to e	xplain why each Ac	tion Code was selected.				ン	Phone No. <u>(28</u>	1 874-8814	
/001				1				1			

#### INSTRUCTIONS

An Entity is a 5 digit identifying number assigned to wells by the Division of Oil, Gas and Mining and used primarily by the Utah State Tax Commission and the Division of State Lands and Forestry to maintain division of interest data for each well. Oil and gas production and disposition volumes are computerized and then sorted by Entity to be used by the various divisions to verify the accurate collection of taxes and royalties.

IMPORTANT: This form is used only to update the Division's computerized oil and gas production accounting system. Please review the Utah Oil and Gas Conservation General Rules to determine what other reports may be required. For help, call (801) 538-5340.

## FORM SHALL BE FILED WITHIN 5 WORKING DAYS OF ANY OF THE FOLLOWING:

The spudding-in of a new well.

A change in physical operations or interests which adds a well to or removes a well from a group of wells that have identical division of interests, produce from the same formation, have product sales from a common tank, LACT meter, or gas meter, and have the same operator.

A change in interest which adds or deletes a well from a participating area of a properly

designated unit.

The conversion of a service well to a producing oil or gas well.

The recompletion of a well which makes it capable of producing from another formation.

### ACTION CODES

A - Use to establish a new Entity number for a new single well. Show the first day hole was made by any type of rig in "Spud Date". This will be the Entity assignment effective date.

B - Use to add a new well to an existing Entity number when

(1) the well is being drilled within the boundaries of a properly designated unit (each

participating area within a unit will have a different Entity number).

(2) the well is being drilled within and will be physically attached to an existing group of wells that have identical division of interests, produce from the same formation, have the same operator, and have product sales from a common tank, LACT meter, or gas meter.

Show the Entity number to which the well is to be assigned in "New Entity No." Show the first day hole was made by any type of rig in "Spud Date". This will be the Entity

assignment effective date.

- C Use to re-assign an existing well from one entity number to another existing entity number when
  - (1) the well is physically attached to an existing group of wells, or

(2) the well is brought into the participating area of a unit, or

(3) the well is recompleted into another formation which brings the well into the participating area of a unit or a group of wells as described under code B. Show the well's current Entity in "Current Entity No." and the Entity to which it

should be re-assigned in "New Entity No." Show the date on which the re-assignment should be made in "Effective Date".

D - Use to re-assign an existing well from one Entity to a new Entity number when

(1) the well is no longer physically attached to a group of wells, or

(2) the well is still attached to a group of wells but has been sold to a different operator than for the remaining wells, or

(3) the well is no longer located within a unit or a participating area of a unit due to a change in unit boundaries, or

(4) the well is recompleted into a new formation not currently covered by an existing

Show the well's current Entity in "Current Entity No." Show the date on which the re-assignment should be made in "Effective Date".

E - Use for situations that do not fall under any of the above. Explain in "Comments".

NOTE: Multiple completion wells will have different Entity numbers assigned to each producing formation. Each formation should be handled as a separate well on this form.

## STATE OF UTAH

C	DIVISION OF OIL GAS AND MINI	ING	5. Lease Congresson and Senal Number: ML 45805
SUNDRY	NOTICES AND REPORTS	ON WELLS	6. If Indians, Allotters or Tribe Name:
	note by child many works, classical expedition works, of to rece	ter plugged and abandoned wells.	7. Und Agreement Name:
1. Type of Well: OIL GAS G	OTHER: COALBED METHAN		8. Wed Name and Number: Helper State A-1
2. Name of Operator:	roleum Corporation		9. AFT Well Number: 43-007-30349
3. Address and Telephone Number:	chase Drive, Houston, TX	77060 281-874-8814	10. Field and Pool, or Wildows Helper CBM
4 Location of Wheel	2019' FWL, NW Sec 3, T14		County: Carbon
11. CHECK APPRO	PRIATE BOXES TO INDICATE	•	
******	E OF INTENT nit in Duplicate)		EQUENT REPORT  It Original Form Only)
☐ Abandonment ☐ Casing Repair ☐ Change of Plans ☐ Conversion to Injection ☐ Fracture Treat ☐ Multiple Completion ☒ Other Spud_Notific Approximate date work will start	New Construction Pull or Alter Casing Recompletion Shoot or Acidize Vent or Flare Water Shut-Off Cation  SPUD 04/25/97, 1100 Hrs.	□ Abandonment □ Casing Repair □ Change of Plans □ Conversion to Injection □ Fracture Treat □ Other □ Date of work completion □ Report results of Multiple Completion □ COMPLETION OR RECOMPLETION AF	•
12. DESCRIBE PROPOSED OR COMPLETED vertical deoths for all markers and zones	) OPERATIONS (Clearly state all pertinent details, and pertinent to this work.)	DEC	REIVE 13 1997
		DIV. OF OI	L, GAS & MINING

(This space for State use only)

Staff Drilling Eng. 09.May.97

### INSTRUCTIONS

Type or print neatly in black ink.

This report form shall be used to notify the Utah Division of Oil, Gas and Mining of the intention to do miscellaneous work on any well for which a specific report form is not provided, and to report the subsequent results of that work.

Do not use this form for proposals to

- drill new wells,
- deepen existing wells beyond their original completion depths,
- reenter previously plugged and abandoned wells.

Use Application for Permit to Drill or Deepen (APD) for such proposals.

In addition to any Sundry Notice forms submitted, a Well Completion or Recompletion Report and Log form must be submitted to the division to report the <u>results</u> of the following operations:

- deepening an existing well,
- reentering a previously plugged and abandoned well,
- completing in multiple reservoirs,
- recompleting to a different reservoir,
- completing or plugging a newly drilled well.

NOTICE OF INTENT - A notice of intention to do work on a well or to change plans previously approved shall be submitted in duplicate and must be received and approved by the division before the work is commenced. The operator is responsible for receipt of the notice by the division in ample time for proper consideration and action. In cases of emergency, the operator may obtain verbal approval to commence work. Within five days after receiving verbal approval, the operator shall submit a Sundry Notice describing the work and acknowledging the verbal approval.

SUBSEQUENT REPORT - A subsequent report shall be submitted to the division within 30 days of the completion of the outlined work. Specific details of the work performed should be provided, including dates, well depths, placement of plugs, etc.

WELL ABANDONMENT - Proposals to abandon a well and subsequent reports of abandonment should include reasons for the abandonment; data on any former or present productive zones, or other zones with present significant fluid contents not sealed off by cement or otherwise; depths (top and bottom) and method of placement of cement plugs; mud or other material placed below, between and above plugs; amount, size, and method of parting of any casing, liner, or tubing pulled and the depth to top of any left in the hole; method of closing top of well; and date well site conditioned for final inspection looking to approval of the abandonment.

Rule reference (Oil and Gas Conservation General Rules, revised 5/1/92):

- R649-8-10

# ANADARKO PETROLEUM CORPORATION WELL HISTORY ONSHORE - U.S.

#### **DEVELOPMENT - DRILLING**

#### FIRST REPORT

HELPER STATE A-1, HELPER PROSPECT, 1621' FNL & 2019' FWL, SEC. 3-T14S, R10E, CARBON CO, UT, AFE 15225, WI 1.000, NRI 0.875, ETD 2900 (FERRON COAL), AZTEC DRLG RIG #184

- 04/25 1325 (996), DRLG, MW AIR: RURT, **SPUD @ 1100 HRS 04/24/97**, 8 5/8" 24# K-55 CSG PRESET @ 316', DO CMT & FE, TOTCO @ 1197: 1 1/4°, CC 118,000. RPT #1
- 04/26 DRLG F/ 1325'-2770', **TD WELL @ 1530 HRS 04/25/97**, POOH TO RUN CSG, LAST SURVEY @ 2557 1°, AVG ROP 69 FPH, MW-AIR, CC 100,800. RPT #2
- 04/27 R/U HALLIBURTON-LOG WELL, R/D LOGGERS, RIH TO CONDITION-BRIDGE @ 2730', CIRC HOLE, POOH, RIH W/ 5 ½" CSG & CMT SAME, N/D BOPE, CUT/CAP CSG, **RELEASE RIG @ 2000** HRS 04/26/97, LAST SURVEY @ 2557 1°, CC 180,300. --DROP FROM REPORT-- RPT #3
- 05/06 PBTD 2707 (FERRON COAL), MIRU, NUBOP, TIH W/ BIT AND SCR, TAG PBTD @ 2707, DISPL CSG W/ HELPER PRODUCED WATER, PRESSURE TEST TO 1500-OK, CLOSE BOP, RDMO CC 185,200.

05/07-08 NO REPORT.

## **HELPER STATE A-1**

W 1621' FNL & 2019' FWL: SEC 3-T14S-R10E API NO. 43-007-30349

12

GL

**KB** 

6052

6040

SPUD

RIG OFF 04/26/1997

04/24/1997 **PRODUCTION** 05/05/1997

SURFACE

WELL WORK HISTORY

05/09/1997 Perf Ferron w/ 3 3/8 16 gram charge 05/15/1997 Frac Ferron w/ 3000 gal 20# pre pad & 50500 gal 20# Delta Frac w/ 96800# 20/40 & 99800# 16/30 12-1/4" Hole ISIP 1856-1599-1560-1532 8-5/8" 24# K-55 316 06/07/1997 Lower Tbg below Perfs put on Production **TOC @ Surface** 06/20/1997 Pump Change TOC 1745 NOTES: Marker JT @ 2086, Float Collar @ 2725 TUBING BREAKDOWN 2-3/8" ROD BREAKDOWN (Holes) **Perforations** TΑ JTS PONIES 20' (10)2269 - 2279 2-3/8" 2297 - 2303 (18)SN 2424 JTS 7/8" 925 (6) 2323 - 2326 2-3/8" 3/4" 1250' (4) 2347 - 2351 NC 2456 JTS (38)**Total Holes** EOT 2457 1.5" 200' SN 2424 2425 2"X1.5"X20' 80 ring, SL 166 **EOT** 2457 DEVIATION ANGLE **FORMATION** TOP 1197 1.25 FERRON SANDSTONE 2244 Fill 2700 2557 FERRON COAL 2272 **PBTD** 2707 TUNUNK SHALE 2426 7-7/8" Hole 2723 5-1/2", 17# N-80 2770 LAST REVISED: 07/14/1997 w/162 sxs cmt TD 2770

## ANADARKO PETROLEUM CORPORATION WELL HISTORY ONSHORE - U.S.

#### **DEVELOPMENT - DRILLING**

#### FIRST REPORT

- HELPER STATE A-1, HELPER PROSPECT, 1621' FNL & 2019' FWL, SEC. 3-T14S, R10E, CARBON CO, UT, AFE 15225, WI 1.000, NRI 0.875, ETD 2900 (FERRON COAL), AZTEC DRLG RIG #184
- 04/25 1325 (996), DRLG, MW AIR: RURT, **SPUD @ 1100 HRS 04/24/97**, 8 5/8" 24# K-55 CSG PRESET @ 316', DO CMT & FE, TOTCO @ 1197: 1 1/4°, CC 118,000. RPT #1
- 04/26 DRLG F/ 1325'-2770', **TD WELL @ 1530 HRS 04/25/97**, POOH TO RUN CSG, LAST SURVEY @ 2557 1°, AVG ROP 69 FPH, MW-AIR, CC 100,800. RPT #2
- 04/27 R/U HALLIBURTON-LOG WELL, R/D LOGGERS, RIH TO CONDITION-BRIDGE @ 2730', CIRC HOLE, POOH, RIH W/ 5 ½" CSG & CMT SAME, N/D BOPE, CUT/CAP CSG, **RELEASE RIG** @ 2000 HRS 04/26/97, LAST SURVEY @ 2557 1°, CC 180,300. --DROP FROM REPORT-- RPT #3
- 05/06 PBTD 2707 (FERRON COAL), MIRU, NUBOP, TIH W/ BIT AND SCR, TAG PBTD @ 2707, DISPL CSG W/ HELPER PRODUCED WATER, PRESSURE TEST TO 1500-OK, CLOSE BOP, RDMO CC 185,200.
- 05/07-08 NO REPORT.
- 05/09 PBTD 2713, MIRU HES, TIH W/ GR/JB, TAG PBTD @ 2713, TOH, TIH W/ GR/CCL/CBL, HELD 2000# ON CSG WHILE LOGGING FROM 2713-1400, TOC @ 1600, TOH, PRESSURE TEST BOP & CSG TO 4000 PSI, RELEASE PRESSURE, CC 185,200.
- 05/10 PBTD 2713 (FERRON COAL), MIRU HES, TIH & PERF FERRON W/ 3 3/8" HOLLOW STEEL CARRIER W/ 16 GRAM CHARGE, PERF 2269-2279 (10), 2297-2303 (18), 2323-2326 (6), 2347-2351 (4), 38 HOLES, SI, RDMO, CC 190,100.
- 05/11 PBTD 2713 (FERRON COAL), SI PREP TO FRAC, CC 190,100.
- 05/12 PBTD 2713 (FERRON COAL), SI PREP TO FRAC, CC 190,100. --DROP FROM REPORT--
- 05/15 PBTD 2713 (FERRON COAL), MIRU FRAC EQUIP, NU TREESAVER & FRAC HD, FRAC 2269-2351 W/3000 GAL 20# GEL PRE-PAD & 50500 GAL 20# DELTA FRAC PLUS 96800# 20/40 SD & 99800# 16/30 SD, AIR 55 BPM, ATP 3780, TOT FLD PMPD 1744 BBLS, MAX PROP CONC 5.5 PPG, ISIP 1856-1599-1560-1532, FRAC GRAD 0.62 PSI/FT, FLOWBACK 2 HRS @ 0.25 BPM, RDMO FRAC EQUIP, ND TREESAVER & FRAC HD, CONT FLOWBACK @ 0.25 BPM, TOT FLOWBACK 6 HRS & WELL DIED, 1744 BLWTR, CC 264,200.
- 05/16 PBTD 2713 (FERRON COAL), NR, CC 264,200.
- 05/17-19 PBTD 2713 (FERRON COAL), NR, CC 264,200.
- 05/20 PBTD 2713 (FERRON COAL), SI, WO PU, CC 264,200. --DROP FROM REPORT--
- 05/21 PBTD 2713 (FERRON COAL), MIRU PU, TIH W/ NC, SN & TBG, CO SAND 2602-2713, SET EOT @ 2418, IFL SURF, SWBD 20 BLW, FFL 100, SI, 1724 BLWTR, CC 272,100.

- 05/22 PBTD 2705 (FERRON COAL), SIT&CP 0, IFL 100, SWBD 170 BLW, SSG, FFL 900, TAG FILL @ 2705, TOH W/ TBG, TIH W/ BP, 1 JT TBG, 4' PS, SN & TBG, ND BOPE, NU WH, EOT @ 2242, SI, 1554 BLWTR, CC 279,800.
- 05/23 PBTD 2705 (FERRON COAL), SITP 0, SICP 25, BD CSG, TIH W/ PMP, SEAT PMP, RDMO PU, TIE IN WH W/ SEP AND FLW LINE TO PIT, START FLOW, 1554 BLWTR, CC 290,500.
- 05/24 PBTD 2705 (FERRON COAL), SI, 1554 BLWTR, CC 290,500.
- 05/25 PBTD 2705 (FERRON COAL), SI, 1554 BLWTR, CC 290,500.
- 05/26 PBTD 2705 (FERRON COAL), PMPD 24 HOURS, 0 MCF, 78 BW, CP 0, FL 283, 1476 BLWTR, CC 290,500.
- 05/27 PBTD 2705 (FERRON COAL), PMPD 24 HOURS, 0 MCF, 97 BW, CP 10, FL 346, 1379 BLWTR, CC 290,520.
- 05/28 PBTD 2705 (FERRON COAL), PMPD 24 HOURS, 25 MCF, 93 BW, CP 20, FL 377, 1002 BLWTR, CC 290,500.
- 05/29 PBTD 2705 (FERRON COAL), PMPD 24 HOURS, 31 MCF, 92 BW, CP 25, FL 441, 910 BLWTR, CC 290,500.
- 05/30 NO REPORT.
- 05/31 PBTD 2705 (FERRON COAL), PMPD 24 HRS, 52 MCF, 97 BLW, FCP 35, FL 442, 813 BLWTR, CC 290,500.
- 06/01 PBTD 2705 (FERRON COAL), PMPD 24 HRS, 53 MCF, 138 BLW, FCP 35, FL 473, 675 BLWTR, CC 290,500.
- 06/02 PBTD 2705 (FERRON COAL), PMPD 24 HRS, 57 MCF, 106 BLW, FCP 35, FL 630, 569 BLWTR, CC 290,500.
- 06/03 PBTD 2705 (FERRON COAL), PMPD 24 HRS, 62 MCF, 105 BLW, FCP 35, FL 630, 464 BLWTR, CC 290,500.
- 06/04 PBTD 2705 (FERRON COAL), PMPD 24 HRS, 67 MCF, 94 BLW, FCP 35, FL 787, 370 BLWTR, CC 290,500.
- 06/05 PBTD 2705 (FERRON COAL), PMPD 24 HRS, 84 MCF, 89 BLW, FCP 35, FL 849, 281 BLWTR, CC 290,500.
- 06/06 PBTD 2705 (FERRON COAL), PMPD 24 HRS, 94 MCF, 88 BLW, FCP 35, FL 976, 193 BLWTR, CC 290,500.
- 06/07 PBTD 2705 (FERRON COAL), PMPD 24 HRS, 75 MCF, 36 BLW, FCP 35, FL 1007, 157 BLWTR, CC 290,500.
- 06/08 PBTD 2700 (FERRON COAL), MIRU PU, TOH W/ RODS & BHP, ND WH, TAG FILL @ 2700, SET EOT @ 2461, NU WH, TIH W/ BHP & RODS, RDMO PU, 157 BLWTR, CC 292,600.
- 06/09 PBTD 2700 (FERRON COAL), PMPD 18 HRS, 79 MCF, 109 BLW, FCP 35, FL 849, 48 BLWTR, CC 292,600.

- 06/10 PBTD 2700 (FERRON COAL), PMPD 18 HRS, 87 MCF, 13 BLW, FCP 35, FL 787, 35 BLWTR, CC 292,600.
- 06/11 PBTD 2700 (FERRON COAL), PMPD 20 HRS, 161 MCF, 45 BW, FCP 35, FL 787, CC 292,600.
- 06/12 PMPD 24 HRS, 175 MCF, 42 BW, FCP 35, FL 2394, CC 292,600.
- 06/13 PBTD 2700, PMPD 24 HRS, 141 MCF, 80 BW, FCP 35, FL 2236, CC 292,600.
- 06/14 PBTD 2700, PMPD 24 HRS, 129 MCF, 77 BW, FCP 35, FL 2236, CC 292,600.
- 06/15 PBTD 2700, PMPD 24 HRS, 119 MCF, 75 BW, FCP 30, FL 2236, CC 292,600.
- 06/16 PBTD 2700, PMPD 24 HRS, 128 MCF, 32 BW, FCP 30, FL 2142, CC 292,600.
- 06/17 PBTD 2700, PMPD 24 HRS, 106 MCF, 40 BW, FCP 30, FL 2142, CC 292,600.
- 06/18 PBTD 2700, PMPD 24 HRS, 106 MCF, 58 BW, FCP 30, FL 2205, CC 292,600.
- 06/19 PBTD 2700, PMPD 6 HRS, 25 MCF, 12 BW, FCP 30, FL 693, CC 292,600.
- 06/20 PBTD 2700, PMPD 0 HRS, 0 MCF, 0 BW, FCP 0, FL 693, CC 292,600.
- 06/21 PBTD 2700, (FERRON COAL), PMPD 8 HRS, 0 MCF, 33 BW, FCP 0, FL 535, CC 292,600.
- 06/22 PBTD 2700, (FERRON COAL), PMPD 24 HRS, 67 MCF, 100 BW, FCP 0, FL 346, CC 292,600.
- 06/23 PBTD 2700, (FERRON COAL), PMPD 24 HRS, 82 MCF, 98 BW, FCP 409, FL 409, CC 292,600.
- 06/24 PBTD 2700 (FERRON COAL), PMPD 24 HRS, 103 MCF, 97 BW, FCP 0, FL 756, CC 292,600.
- 06/25 PBTD 2700, (FERRON COAL), PMPD 24 HRS, 119 MCF, 85 BW, FCP30, FL 756, CC 292,600.
- 06/26 PBTD 2700 (FERRON COAL), PMPD 24 HRS, 137 MCF, 97 BW, FCP 30, FL 787, SI, PUMPED 4% BORIC FLUSH, 96 BBL CHEM, 300 BW, 396 BLWTR, CC 295,600.
- 06/27 PBTD 2700 (FERRON COAL), PMPD 0 HRS, 0 MCF, 0 BW, FCP 0, FL 535, 396 BLWTR, CC 295,600.
- 06/28 PBTD 2700 (FERRON COAL), PMPD 24 HRS, 57 MCF, 63 BW, FCP 25, FL 597, 333 BLWTR, CC 295,600.
- 06/29 PBTD 2700 (FERRON COAL), PMPD 24 HRS, 58 MCF, 89 BW, FCP 35, FL 126, 244 BLWTR, CC 295,600.
- 06/30 PBTD 2700 (FERRON COAL), PMPD 24 HRS, 60 MCF, 90 BW, FCP 35, FL 157, 154 BLWTR, CC 295,600.
- 07/01 PBTD 2700 (FERRON COAL), PMPD 24 HRS, 76 MCF, 92 BW, FCP 45, FL 157, 62 BLWTR, CC 295,600.
- 07/02 PBTD 2700 (FERRON COAL), PMPD 24 HRS, 102 MCF, 71 BW, FCP 45, FL 283, CC 295,600.
- 07/03 PBTD 2700 (FERRON COAL), PMPD 24 HRS, 122 MCF, 91 BW, FCP 45, FL 441, CC 295,600.

07/04 PBTD 2700 (FERRON COAL), PMPD 24 HRS, 145 MCF, 89 BW, FCP 45, FL 441, CC 295,600.
07/05 PBTD 2700 (FERRON COAL), PMPD 24 HRS, 196 MCF, 89 BW, FCP 35, FL 598, CC 295,600.
07/06 PBTD 2700 (FERRON COAL), PMPD 24 HRS, 222 MCF, 30 BW, FCP 25, FL 630, CC 295,600.
07/07 PBTD 2700 (FERRON COAL), PMPD 24 HRS, 207 MCF, 60 BW, FCP 35, FL 630, CC 295,600.
07/08 PBTD 2700 (FERRON COAL), PMPD 24 HRS, 232 MCF, 62 BW, FCP 25, FL 976, CC 295,600.
07/09 PBTD 2700 (FERRON COAL), PMPD 24 HRS, 268 MCF, 87 BW, FCP 25, FL 1007, CC 295,600.
07/10 PBTD 2700 (FERRON COAL), PMPD 24 HRS, 284 MCF, 90 BW, FCP 25, FL 2236, CC 295,600.

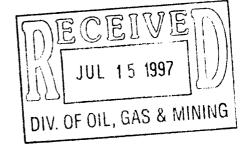


July 14, 1997

CONFIDENTIAL

Utah Division of Oil, Gas, and Mining 1594 West North Temple, Suite 1210 P.O. Box 145801 Salt Lake City, Utah 84414-5801

RE: Helper State A-1 Sec. 3, T14S, R10E Carbon County, Utah



#### Gentlemen:

Please find enclosed, in triplicate, the Well Completion Report (Form 8) for the above referenced well. Also enclosed are copies of the wellbore diagrams, drilling reports, and open hole logs.

Please hold the logs confidential for a period of two years. Should need any additional information, please contact the undersigned at (281) 873-3899.

Best Regards,

ANADARKO PETROLEUM CORPORATION

April A. Leger

Sr. Engineering Technician

CC: Bureau of Land Management Moab District Office

P.O. Box 970

Moab, Utah 84532

Bureau of Land Management Price River Resources Area 900 North, 700 East

Price, Utah 84501

AAL TRC

SMF Reading File

## STATE OF UTAH

		DIVISION	OF OIL,	GAS A	AND MIN	IING					L 4580!		AND SERIAL NO.
WELL	COMP	LETION	OR RECO	MPLE	TION R	EPORT AN	ID I	LOG		_			E OR TRIBE NAME
1a. TYPE OF WELL b. TYPE OF COM		OIL WELL	GAS WELL	X	DRY	Other				7. UN	VIT AGREE	MENT NA	AME
NEW WELL X	WORK OVER	DEEP-	PLUG BACK		DIFF.	Other —				O EA	RM OR LE	AOP NAN	(P
2. NAME OF OPERATO							<u>ت</u> ا	777	تاعا		elper S		
Anadarko Petr 3. ADDRESS OF OF		orporati	on			الكاقال	[]	LW		<b>W</b>	ELL NO.		
17001 Northch		. Housto	n. Texas	77060						A.			
4. LOCATION OF WEL At surface 1621' FNL & 2	L (Report	location clearl	y and in accorda		any State req	nirements) UL	15	1997 ——		, , , ,	elper (		R WILDCAT
At top prod. interva					DI	V. OF OIL,	GA	S & I	MININ	11. SI	EC., T., R., ND SURVEY	M., OR E	BLK.
At total depth Same				14. AI			TE ISS	·····		<u></u> ⊢ Se	ection DUNTY	3, T	14S, R10E 13. state
Sallie													
15. DATE SPUDDED 04/24/97	1	е т.d. reache /25/97	1		•	dy to prod.) 18. El	LEVA'	28-97 TIONS (DI 'G.L	F, RKB, RT,	Carb gr, etc			<u>  Utah</u> ev. casinghead 052' KB
20. TOTAL DEPTH, MD 2770' MD	& TVD	21. PLUG, BA	ACK T.D., MD & T	VD 2	22. IF MULTII HOW MAN	PLE COMPL.,		23. INT		t	) - 2770	DLS	CABLE TOOLS
24. PRODUCING INTER	VAL(S), OF T	HIS COMPLET	ION - TOP, BOTTO	M, NAME	(MD AND TV	חחור	ID	CLIT	141	· · · · · · · · · · · · · · · · · · ·		25.	WAS DIRECTIONAL SURVEY MADE
Ferron Coal (			· · · · · · · · · · · · · · · · · · ·			CONF		_					No No
26. TYPE ELECTRIC AN High Resolution			ectrual De	nsity	Inducti	on Dual-Spa	? ced			ell Core			NO X (Submit analysis) NO X (See reverse side)
28.					1	ort all strings set in	well)	)					
CASING SIZE/GRADE 8 5/8" K-55	24#	IGHT, LB./FT.	316	`(MD)	12 1/4	LE SIZE	12	On eye	CEMENT				MONO PULLED
5 1/2" N-80	17#		2770		7 7/8"				cmt C				None
								- U/10	00	1400			Hone
SIZE	TOP (M		ER RECORD OTTOM (MD)	SACKS	CEMENT	SCREEN (MD)		30. SIZ	E		NG RECO		PACKER SET (MD)
								2 3/	8"		2457'		N/A
31. PERFORATION RECO 2269 - 2279	RD (Interva) - 1	l, size and nui SPF w/ (	nber) 0.6 EHD			32. DEPTH INTER			FRACTU				
2297 - 2303		SPF w/ (				2269 - 23		MD)	4		3,500		erial used 20#
2323 - 2326	_	SPF w/ (		c		DELITIA					c w/19		
2347 - 2351		SPF w/ (		l	:UNF	LENLIA							
33.		311 W	J.O LIID		PRODUCT	ION							
DATE FIRST PRODUCTION 05/24/97	N	PRODUCTION		ing, gas		- size and type of p	ритр)	)			WELL SI		roducing or
DATE OF TEST 05/27/97	HOURS T	<del>' '</del>	сноке size Open		O'N. FOR PERIOD	OIL - BBL.		GAS - MC	rF.	93	ER - BBL,	l G	AS - OIL RATIO
FLOW. TUBING PRESS.	CASING I	PRESSURE	CALCULATED	OIL -	BBL.	GAS - MCF.			WATER - I		10		/ITY - API (CORR.)
N/A	20		24-HOUR RATE	0	JU	ONFIDENTIA	ΑL		93			/A	
34. DISPOSITION OF GAS Sold to Quest		for fuel, vent	ed, etc.)			PERIOD EXPIRED					vitnessed f Dunc		
35. LIST OF ATTACHMENT Wellbore Diagn	ram, dr	illing re	eport, log	<u> </u>	ON.	<u> 10'23 99</u>					· ··· <u>-</u>		- 1872
36. I hereby certify the	the foregoi	ng and attache	d information is	complete	and correct a	s determined from	all av	ailable re	cords				
SIGNED	Haz	Sh.	ad Frazie	<u>er</u>	TITLE	duction Eng	ıne	:er			DATE	07/1	4/97
	See S	Spaces for /	Additional Dat	a on Re	verse Side	•						·	

This form should be completed in compliance with the Utah Oil and Gas Conservation General Rules. If not filed prior to this time, all logs, tests, and directional surveys as required by Utah Rules should be attached and submitted with this report.

ITEM 18: Indicate which elevation is used as reference for depth measurements given in other spaces on this form and on any attachment. ITEMS 22 and 24: If this well is completed for separate production from more than one interval zone (multiple completion), so state in item 22, and in item 24 show the producing intervals, or intervals, top(s), bottom(s) and name(s) for only the interval reported in item 33. Submit a separate report (page) on this form, adequately identified, for each additional interval to be separately produced, showing the additional data

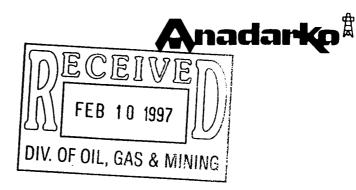
pertinent to such interval. 129: "Sacks Cement": Attached supplemental records for this well should show the details for any multiple stage cementing and the location of

ITEM 33: Submit a separate completion report on this form for each interval to be separately produced (see instruction for items 22 and 24 above).

GEOLOGIC MARKERS	Тор	Meas. Depth   True Vert.Depth	2244	2272	2426		 	 
38. GEOLOGIC		Мате	Fer <b>tare</b> Sandstone	Ferron Coal	Tununk Shale			
37. SUMMARY OF POROUS ZONES: Show all important zones of porosity and contents thereof; cored intervals; and all drill-stem, tests, including depth interval tested,cushion used, time tool open, flowing and shut-in pressures, and recoveries).	Description, contents, etc.	<b>'0</b>		ЕИ		T		
f porosity and including depth	Bottom		2272	2426	2770	in the second se		
OROUS ZONES: Ortant zones of stem, tests, or, flowing and	Тор		2244	2272	2426	• · · · · · · · · · · · · · · · · · · ·		
37. SUMMARY OF PC Show all impo andalldrill- time tool ope	Formation		Ferron Sand	Ferron Coal	Tununk Shale			

February 5, 1997

Mr. Mike Hebertson State of Utah Division of Oil, Gas and Mining 1594 W. North Temple Suite 1210 Salt Lake City, Utah 84114-5801



RE:

Birch A-1

Helper State A-1

Helper State D-7

Sec 5-14S-10E

Sec 3-14S-10E

Sec 4-14S-10E

Carbon Co., Utah Carbon Co., Utah

Carbon Co., Utah

Dear Mr. Hebertson:

Pursuant to our conversation, this letter is to clarify that the above listed wells are Fee and State surface. This letter as well as the BOP Schematic are being faxed to you. Since the well is being air drilled, a rotating head will be used.

As requested, the Arch report will be sent to your attention via regular mail.

Should you have any further questions, please do not hesitate to call me at 281-873-1280.

Sincerely,

ANADARKO PETROLEUM CORPORATION

**Dave Winchester** 

**Division Drilling Engineer** 

DRW/ddg

**Enclosures** 

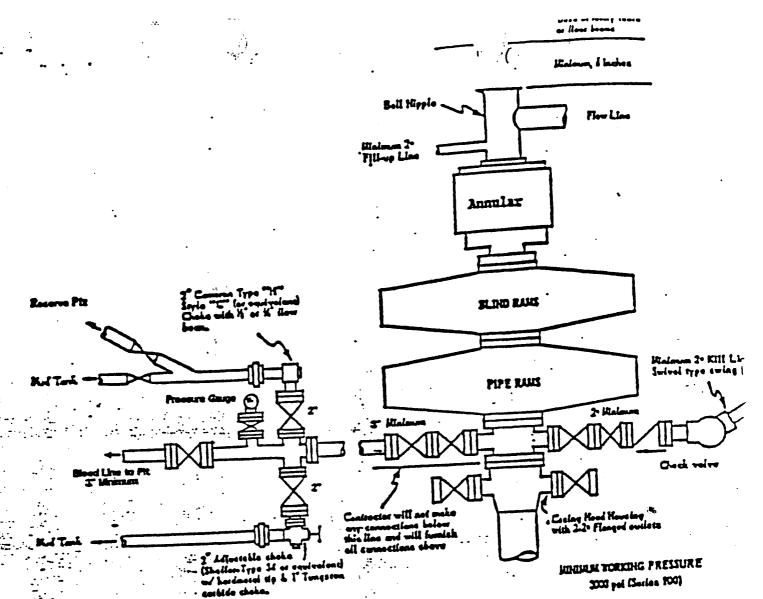


EXHIBIT A



MOUNT SLOWOUT PREYENTER
RECURREMENTS - NORMAL
PRESSURE CHALLON SERVICE

## Division of Oil, Gas and Mining

## **OPERATOR CHANGE WORKSHEET (for state use only)**

ROUTING	
CDW	

X - Change of Operator (Well Sold)			Operator Name Change/Merger									
The operator of the well(s) listed below has chan	ged, e	ffective	:	4/\/2013								
FROM: (Old Operator): N0035-Anadarko Petroleum Corporation PO Box 173779 Denver, CO, 80214				TO: ( New Operator): N3940- Anadarko E&P Onshore LLC PO Box 173779 Denver, CO 802014								
Phone: 1 (720) 929-6000				Phone: 1 (720) 929-6000								
CA No.	-			Unit:								
WELL NAME	SEC	TWN	RNG	API NO	ENTITY NO	LEASE TYPE	WELL TYPE	WELL STATUS				
See Attached List												
OPERATOR CHANGES DOCUMENT. Enter date after each listed item is completed  1. (R649-8-10) Sundry or legal documentation wa  2. (R649-8-10) Sundry or legal documentation wa	s rece	eived fro		_		<u>4/9/2013</u> <u>4/9/2013</u>						
3. The new company was checked on the <b>Departu</b>	nent (	of Com	merce	, Division of Co	orporation	s Database on:	•	4/10/2013				
4a. Is the new operator registered in the State of U. 5a. (R649-9-2) Waste Management Plan has been re 5b. Inspections of LA PA state/fee well sites compl. 5c. Reports current for Production/Disposition & S.	ceive ete or undri	n: es on:		Yes 4/10/2013 4/10/2013	- - -	593715-0161						
6. Federal and Indian Lease Wells: The BL					_		DIA	NT/A				
or operator change for all wells listed on Federa 7. Federal and Indian Units:	u or i	ndian ie	ases o	n:	BLM	4/2/2013	BIA	N/A				
The BLM or BIA has approved the successor	ofun	it oners	tor for	· wells listed on:		N/A						
8. Federal and Indian Communization Ag		_			•	17/11	-					
The BLM or BIA has approved the operator is			-			N/A						
9. Underground Injection Control ("UIC"					orm 5 Trai		ity to					
Inject, for the enhanced/secondary recovery un							4/10/2013					
DATA ENTRY:	- p- 0,	, •••			(-)							
1. Changes entered in the Oil and Gas Database	on:			4/11/2013								
2. Changes have been entered on the Monthly Op		r Chan	ge Sp	read Sheet on:	•	4/11/2013						
3. Bond information entered in RBDMS on:				4/10/2013	-							
4. Fee/State wells attached to bond in RBDMS on			,	4/11/2013	-							
5. Injection Projects to new operator in RBDMS of		D/Marr		4/11/2013	- NT/A							
6. Receipt of Acceptance of Drilling Procedures for	or AP	D/New	on:		<u>N/A</u>	-						
BOND VERIFICATION:  1. Federal well(s) covered by Bond Number:				WYB000291								
<ol> <li>Federal well(s) covered by Bond Number:</li> <li>Indian well(s) covered by Bond Number:</li> </ol>				N/A	-							
3a. (R649-3-1) The <b>NEW</b> operator of any state/fe	e well	(s) liste	d cove		- umber	22013542						
3b. The <b>FORMER</b> operator has requested a release				_	N/A		•					
		<b>~</b> **				-						
LEASE INTEREST OWNER NOTIFIC					1 2	a stri						
4. (R649-2-10) The <b>NEW</b> operator of the fee wells					-	om the Division						
of their responsibility to notify all interest owner	s of t	nis chan	ige on:		4/11/2013							
COMMENTS:												

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES 5. LEASE DESIGNATION AND SERIAL NUMBER: DIVISION OF OIL, GAS AND MINING See Wells 6. IF INDIAN, ALLOTTEE OR TRIBE NAME: SUNDRY NOTICES AND REPORTS ON WELLS 7. UNIT or CA AGREEMENT NAME: Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals. 8. WELL NAME and NUMBER: 1. TYPE OF WELL OTHER CBM Wells GAS WELL OIL WELL 9. API NUMBER: 2. NAME OF OPERATOR: See Wells Anadarko Petroleum Corporation 10. FIELD AND POOL, OR WILDCAT: PHONE NUMBER: 3. ADDRESS OF OPERATOR: (720) 929-6000 STATE CO 710 80217 P.O. Box 173779 Denver 4. LOCATION OF WELL FOOTAGES AT SURFACE: STATE: QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: UTAH CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA TYPE OF ACTION TYPE OF SUBMISSION REPERFORATE CURRENT FORMATION ACIDIZE DEEPEN NOTICE OF INTENT SIDETRACK TO REPAIR WELL FRACTURE TREAT (Submit in Duplicate) ALTER CASING TEMPORARILY ABANDON NEW CONSTRUCTION Approximate date work will start: CASING REPAIR TUBING REPAIR CHANGE TO PREVIOUS PLANS OPERATOR CHANGE 4/8/2013 VENT OR FLARE PLUG AND ABANDON CHANGE TUBING SUBSEQUENT REPORT WATER DISPOSAL PLUG BACK CHANGE WELL NAME (Submit Original Form Only) WATER SHUT-OFF PRODUCTION (START/RESUME) CHANGE WELL STATUS Date of work completion: COMMINGLE PRODUCING FORMATIONS RECLAMATION OF WELL SITE OTHER: RECOMPLETE - DIFFERENT FORMATION CONVERT WELL TYPE 12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc. The operator is requesting authorization to transfer the wells from Anadarko Petroleum Corporation and Anadarko Production Company to Anadarko E&P Onshore, LLC. Please see the attached list of 181 wells that are currently filed under Anadarko Petroleum Corporation and Anadarko Production Company. The state/fee wells will be under bond number 22013542, and the KEULIVED federal wells will be under bond number WYB000291. Effective 4/1/13 APR 0 9 2013 Please contact the undersigned if there are any questions. DIV OF OIL GAS & MININ Jaime Scharnowske Jaime Scharnowske Regulatory Analyst Regulatory Analyst Anadarko E&P Onshore, LLC N 3940 NO035 Anadarko Petroleum Corporation P.O. Box 173779 P.O. Box 173779 Denver, CO 80214 Denver, CO 80214 (720) 929-6000 (720) 929-6000 Regulatory Analyst Jaime Scharnowske NAME (PLEASE PRINT) DATE 4/8/2013 SIGNATURE

(This space for State u

APR 1 1 2013

DIV. OIL GAS & MINING Rachel Modina (See Instructions on Reverse Side)

## Anadarko Petroleum Corporation (N0035) to Anadarko E&P Onshore, LLC (N3940) Effective 1- April-2013

						Lease	Well	Well
Well Name	Sec	Twnshp	Range	API	Entity No.	Type	Type	status
HELPER ST SWD 1	03	140S	100E	4300730361	12258	State	WD	Α
FED F-2 SWD	08	140S	100E	4300730555	12557	Federal	WD	A
CLAWSON SPRING ST SWD 4	13	160S	080E	4301530477	12979	State	WD	Α
CLAWSON SPRING ST SWD 1	36	150S	080E	4300730721	12832	State	WD	I
HELPER FED B-1	33	130S	100E	4300730189	11537	Federal	GW	P
HELPER FED A-1	23	130S	100E	4300730190	11517	Federal	GW	P
HELPER FED A-3	22	130S	100E	4300730213	11700	Federal	GW	P
HELPER FED C-1	22	130S	100E	4300730214	11702	Federal	GW	P
HELPER FED B-5	27	130S	100E	4300730215	11701	Federal	GW	P
HELPER FED A-2	22	130S	100E	4300730216	11699	Federal	GW	P
HELPER FED D-1	26	130S	100E	4300730286	12061	Federal	GW	P
BIRCH A-1	05	140S	100E	4300730348	12120	Fee	GW	P
HELPER ST A-1	03	140S	100E	4300730349	12122	State	GW	P
HELPER ST D-7	04	140S	100E	4300730350	12121	State	GW	P
CHUBBUCK A-1	31	130S	100E	4300730352	12397	Fee	GW	P
VEA A-1	32	130S	100E	4300730353	12381	Fee	GW	P
VEA A-2	32	130S	100E	4300730354	12483	Fee	GW	P
VEA A-3	32	130S	100E	4300730355	12398	Fee	GW	P
VEA A-4	32	130S	100E	4300730356	12482	Fee	GW	P
HELPER ST A-8	02	140S	100E	4300730357	12257	State	GW	P
HELPER ST A-3	02	140S	100E	4300730358	12254	State	GW	P
HELPER ST A-4	02	140S	100E	4300730359	12255	State	GW	P
HELPER ST A-7	02	140S	100E	4300730360	12256	State	GW	P
HELPER ST A-2	03	140S	100E	4300730362	12232	State	GW	P
HELPER ST A-5	03	140S	100E	4300730363	12231	State	GW	P
HELPER ST A-6	03	140S	100E	4300730364	12233	State	GW	P
HELPER ST D-4	04	140S	100E	4300730365	12228	State	GW	P
HELPER ST D-3	05	140S	100E	4300730366	12184	State	GW	P
HELPER ST D-5	04	140S	100E	4300730367	12226	State	GW	P
HELPER ST D-8	04	140S	100E	4300730368		State	GW	P
HELPER ST D-2	05	140S	100E	4300730369		State	GW	P
HELPER ST D-6	05	140S	100E	4300730370		State	GW	P
HELPER ST D-1	06	140S	100E	4300730371	12399	State	GW	P
BIRCH A-2	08	140S	100E	4300730372	12189	Fee	GW	P
HELPER ST A-9	10	140S	100E	4300730373	12230	State	GW	P
HELPER ST B-1	09	140S	100E	4300730376	12227	State	GW	P
HELPER FED F-3	08	140S	100E	4300730378	12252	Federal	GW	P
HELPER FED F-4	09	140S	100E	4300730379		Federal	GW	P
HELPER ST A-10	10	140S	100E	4300730433	12488	State	GW	P
HELPER ST A-10 HELPER ST A-11	11	140S	100E	4300730434		State	GW	P
HELPER ST A-11 HELPER ST A-12	10	140S	100E	4300730434		State	GW	P
HELPER ST A-12 HELPER ST A-13	10	140S	100E	4300730435		State	GW	P
	09	140S	100E	4300730430		State	GW	P
HELPER ST B-2 HELPER FED E-7	19	130S	100E	4300730437		Federal	GW	P
	33	130S	100E	4300730530		Federal	GW	P
HELPER FED B-2	33	130S 130S	100E 100E	4300730530	12619	Federal	GW	P
HELPER FED B-4	33	130S 130S	100E 100E	4300730531		Federal	GW	P
HELPER FED B-4		130S 130S	100E 100E	4300730532		Federal	GW	P
HELPER FED B-6	27		100E 100E	4300730533		Federal	GW	P
HELPER FED B-7	27	130S					GW	P
HELPER FED B-8	27	130S	100E	4300730535	12631	Federal	G W	I.

## Anadarko Petroleum Corporation (N0035) to Anadarko E&P Onshore, LLC (N3940) Effective1-April-2013

Near							Lease	Well	Well
HELPER FED B-9	Well Name	Sec	Twnshp	Range	API	Entity No.			
HELPER FED B-10								GW	P
HELPER FED B-11					4300730537	12626	Federal	GW	P
HELPER FED B-12					4300730538	12628	Federal	GW	P
HELPER FED B-13						12627	Federal	GW	P
HELPER FED B-14						12621	Federal	GW	P
HELPER FED D-2				100E	4300730541	12620	Federal	GW	P
HELPER FED D-3					4300730542	12650	Federal	GW	P
HELPER FED D-4		26	130S	100E	4300730543	12634	Federal	GW	P
HELPER FED D-5					4300730544	12625	Federal	GW	P
HELPER FED D-6		35	130S	100E	4300730545	12637	Federal	GW	P
HELPER FED E-1		35	130S	100E	4300730546	12635	Federal	GW	P
HELPER FED H-2		29	130S	100E	4300730547	13246	Federal	GW	P
HELPER FED H-1		29	130S	100E	4300730548	12636	Federal	GW	P
HELPER FED H-2		01	140S	100E	4300730549	12653	Federal	GW	P
OLIVETO FED A-2		01	140S	100E	4300730550	12647	Federal	GW	P
HELPER FED F-1		08	140S	100E	4300730556	12630	Federal	GW	P
SMITH FED A-1   09   140S   100E		08	140S	100E	4300730557	12629	Federal	GW	P
SE INVESTMENTS A-1		09	140S	100E	4300730558	13004	Federal	GW	P
HELPER ST A-14		06	140S	100E	4300730570	12624	Fee	GW	P
HELPER ST A-15 HELPER ST E-1 36 130S 100E 4300730572 12613 State GW P HELPER ST E-1 36 130S 100E 4300730573 12615 State GW P HELPER ST E-2 36 130S 100E 4300730574 12616 Fee GW P HARMOND A-1 07 140S 100E 4300730586 12616 Fee GW P HELPER ST E-3 36 130S 100E 4300730586 12616 Fee GW P HELPER ST E-3 36 130S 100E 4300730592 12868 State GW P HELPER FED A-6 23 130S 100E 4300730593 12649 Federal GW P HELPER FED D-7 26 130S 100E 4300730594 12651 Federal GW P HELPER FED D-8 35 130S 100E 4300730595 12652 Federal GW P HELPER ST E-4 36 130S 100E 4300730595 12652 Federal GW P HELPER ST E-4 36 130S 100E 4300730595 12652 Federal GW P HELPER ST E-4 36 130S 100E 4300730597 12618 State GW P HELPER ST A-16 11 140S 100E 4300730604 12648 Fee GW P CLAWSON SPRING ST A-2 36 150S 080E 4300730604 12648 Fee GW P CLAWSON SPRING ST A-3 36 150S 080E 4300730605 12856 State GW P CLAWSON SPRING ST A-3 36 150S 080E 4300730635 12856 State GW P CLAWSON SPRING ST D-5 31 150S 080E 4300730636 13001 State GW P CLAWSON SPRING ST D-5 31 150S 090E 4300730644 12849 State GW P CLAWSON SPRING ST D-6 31 150S 090E 4300730643 12847 State GW P CLAWSON SPRING ST D-7 31 150S 090E 4300730644 12849 State GW P CLAWSON SPRING ST D-7 31 150S 090E 4300730643 12847 State GW P HELPER FED A-7 HELPER FED A-7 22 130S 100E 4300730679 13015 Federal GW P HELPER FED A-5 HELPER FED A-7 22 130S 100E 4300730679 13015 Federal GW P HELPER FED C-2 24 130S 100E 4300730680 13203 Federal GW P HELPER FED C-4 24 130S 100E 4300730680 13203 Federal GW P HELPER FED C-7 21 130S 100E 4300730685 13245 Federal GW P HELPER FED C-7 21 130S 100E 4300730687 13015 Federal GW P HELPER FED D-10 25 130S 100E 4300730687 12844 State GW P HELPER FED D-10 25 130S 100E 4300730687 13010 Federal GW P HELPER FED D-10 25 130S 100E 4300730687 13015 Federal GW P HELPER FED D-10 25 130S 100E 4300730687 12992 Federal GW P HELPER FED D-10 25 130S 100E 4300730687 12992 Federal GW P HELPER FED D-10 4300730688 13005 Federal GW P HELPER FED D-10 4300730688 13005 Federal GW P HELPER FED D-10 4300730688 13005 Federal GW P H				100E	4300730571	12612	State	GW	P
HELPER ST E-1 36 130S 100E 4300730573 12615 State GW P HELPER ST E-2 36 130S 100E 4300730574 12614 State GW P HARMOND A-1 07 140S 100E 4300730586 12616 Fee GW P HELPER ST E-3 36 130S 100E 4300730592 12868 State GW P HELPER FED A-6 23 130S 100E 4300730593 12649 Federal GW P HELPER FED D-7 26 130S 100E 4300730594 12651 Federal GW P HELPER FED D-8 35 130S 100E 4300730595 12652 Federal GW P CLAWSON SPRING ST A-1 36 150S 080E 4300730597 12618 State GW P HELPER ST E-4 36 130S 100E 4300730597 12618 State GW P HELPER ST A-16 11 140S 100E 4300730598 12825 State GW P CLAWSON SPRING ST A-2 36 150S 080E 4300730603 12638 State GW P CLAWSON SPRING ST A-3 36 150S 080E 4300730603 12638 State GW P CLAWSON SPRING ST A-3 36 150S 080E 4300730603 12638 State GW P CLAWSON SPRING ST A-3 36 150S 080E 4300730603 12846 State GW P CLAWSON SPRING ST A-3 36 150S 080E 4300730635 12856 State GW P CLAWSON SPRING ST A-3 36 150S 080E 4300730635 12856 State GW P CLAWSON SPRING ST A-3 36 150S 080E 4300730636 13001 State GW P CLAWSON SPRING ST D-5 31 150S 090E 4300730642 12852 State GW P CLAWSON SPRING ST D-5 31 150S 090E 4300730641 12849 State GW P CLAWSON SPRING ST D-5 31 150S 090E 4300730644 12849 State GW P CLAWSON SPRING ST D-6 31 150S 090E 4300730644 12849 State GW P HELPER FED A-5 23 130S 100E 4300730678 13346 Federal GW P HELPER FED A-5 23 130S 100E 4300730678 13346 Federal GW P HELPER FED B-15 28 130S 100E 4300730680 13203 Federal GW P HELPER FED C-2 24 130S 100E 4300730681 13016 Federal GW P HELPER FED C-2 24 130S 100E 4300730681 13016 Federal GW P HELPER FED C-2 24 130S 100E 4300730681 13016 Federal GW P HELPER FED C-7 21 130S 100E 4300730681 13016 Federal GW P HELPER FED C-7 21 130S 100E 4300730681 13016 Federal GW P HELPER FED D-10 25 130S 100E 4300730688 13295 Federal GW P HELPER FED D-10 25 130S 100E 4300730688 12992 Federal GW P HELPER FED D-10 25 130S 100E 4300730688 13005 Federal GW P HELPER FED D-10 25 130S 100E 4300730688 13005 Federal GW P		11		100E	4300730572	12613	State	GW	P
HELPER ST E-2  36 130S 100E				100E	4300730573	12615	State	GW	P
HARMOND A-1 07 140S 100E 4300730586 12616 Fee GW P HELPER ST E-3 36 130S 100E 4300730592 12868 State GW P HELPER FED A-6 23 130S 100E 4300730593 12649 Federal GW P HELPER FED D-7 26 130S 100E 4300730594 12651 Federal GW P HELPER FED D-8 35 130S 100E 4300730595 12652 Federal GW P HELPER ST E-D D-8 35 130S 100E 4300730595 12652 Federal GW P HELPER ST E-4 36 130S 100E 4300730597 12618 State GW P HELPER ST A-16 11 140S 100E 4300730598 12825 State GW P CHUBBUCK A-2 06 140S 100E 4300730603 12638 State GW P CLAWSON SPRING ST A-3 36 150S 080E 4300730603 12638 State GW P CLAWSON SPRING ST A-3 36 150S 080E 4300730635 12856 State GW P CLAWSON SPRING ST A-4 36 150S 080E 4300730635 12856 State GW P CLAWSON SPRING ST A-5 31 150S 080E 4300730637 12844 State GW P CLAWSON SPRING ST D-5 31 150S 090E 4300730642 12852 State GW P CLAWSON SPRING ST D-5 31 150S 090E 4300730642 12852 State GW P CLAWSON SPRING ST D-5 31 150S 090E 4300730642 12852 State GW P CLAWSON SPRING ST D-7 31 150S 090E 4300730642 12852 State GW P CLAWSON SPRING ST D-6 31 150S 090E 4300730641 12849 State GW P CLAWSON SPRING ST D-7 31 150S 090E 4300730641 12849 State GW P HELPER FED A-7 22 130S 100E 4300730677 13010 Federal GW P HELPER FED B-15 28 130S 100E 4300730679 13015 Federal GW P HELPER FED B-16 28 130S 100E 4300730681 13203 Federal GW P HELPER FED C-2 24 130S 100E 4300730681 13016 Federal GW P HELPER FED C-2 24 130S 100E 4300730681 13016 Federal GW P HELPER FED C-2 24 130S 100E 4300730684 13203 Federal GW P HELPER FED C-2 24 130S 100E 4300730684 13204 Federal GW P HELPER FED C-7 21 130S 100E 4300730686 13203 Federal GW P HELPER FED D-9 25 130S 100E 4300730686 12993 Federal GW P HELPER FED D-10 25 130S 100E 4300730686 12993 Federal GW P HELPER FED D-10 25 130S 100E 4300730688 13005 Federal GW P HELPER FED D-10 25 130S 100E 4300730688 13005 Federal GW P					4300730574	12614	State	GW	P
HELPER ST E-3  36 130S 100E 4300730592 12868 State GW P HELPER FED A-6  HELPER FED D-7  26 130S 100E 4300730593 12649 Federal GW P HELPER FED D-7  26 130S 100E 4300730594 12651 Federal GW P HELPER FED D-8  35 130S 100E 4300730595 12652 Federal GW P HELPER ST B-4  36 150S 080E 4300730595 12652 Federal GW P HELPER ST E-4  36 130S 100E 4300730598 12825 State GW P HELPER ST A-16  11 140S 100E 4300730603 12638 State GW P HELPER ST A-16  11 140S 100E 4300730604 12648 Fee GW P CLAWSON SPRING ST A-2  36 150S 080E 4300730604 12648 Fee GW P CLAWSON SPRING ST A-3  36 150S 080E 4300730635 12856 State GW P CLAWSON SPRING ST A-3  36 150S 080E 4300730635 12856 State GW P CLAWSON SPRING ST A-3  36 150S 080E 4300730631 12844 State GW P CLAWSON SPRING ST A-4  36 150S 080E 4300730631 12844 State GW P CLAWSON SPRING ST D-5  31 150S 090E 4300730642 12852 State GW P CLAWSON SPRING ST D-5  31 150S 090E 4300730642 12852 State GW P CLAWSON SPRING ST D-6  31 150S 090E 4300730641 12849 State GW P CLAWSON SPRING ST D-7  31 150S 090E 4300730644 12849 State GW P HELPER FED A-5  430S 100E 4300730677 13010 Federal GW P HELPER FED A-7  HELPER FED B-15  28 130S 100E 4300730677 13010 Federal GW P HELPER FED B-16  28 130S 100E 4300730680 13203 Federal GW P HELPER FED C-2  4 130S 100E 4300730681 13016 Federal GW P HELPER FED C-7  21 130S 100E 4300730681 13016 Federal GW P HELPER FED C-7  21 130S 100E 4300730681 13016 Federal GW P HELPER FED C-7  21 130S 100E 4300730681 13016 Federal GW P HELPER FED D-9  25 130S 100E 4300730681 13016 Federal GW P HELPER FED D-10  25 130S 100E 4300730681 13203 Federal GW P HELPER FED D-10  4300730688 13205 Federal GW P HELPER FED D-10  4400730688 13205 Federal GW P HELPER FED D-10  4500730688 13205 Federal GW P HELPER FED D-10  4500730688 13205 Federal GW P HELPER FED D-10  4500730688 13205 Federal GW P					4300730586	12616	Fee	GW	P
HELPER FED A-6 HELPER FED D-7 HELPER FED D-7 LAWSON SPRING ST A-1 HELPER ST A-16 CLAWSON SPRING ST A-2 CLAWSON SPRING ST A-2 CLAWSON SPRING ST A-3 B 150S B 100E B 4300730597 B 12652 B 76deral B 70W P HELPER ST E-4 B 100E B 1100E B 4300730597 B 12618 B 5tate B 70W P HELPER ST E-4 B 100E B 1100E B 14300730597 B 12618 B 5tate B 70W		36		100E	4300730592	12868	State	GW	P
HELPER FED D-7 HELPER FED D-8 35 130S 100E 4300730594 12651 Federal GW P HELPER FED D-8 35 130S 100E 4300730595 12652 Federal GW P HELPER ST D-8 CLAWSON SPRING ST A-1 36 150S 080E 4300730597 12618 State GW P HELPER ST E-4 36 130S 100E 4300730598 12825 State GW P HELPER ST A-16 11 140S 100E 4300730603 12638 State GW P CHUBBUCK A-2 06 140S 100E 4300730604 12648 Fee GW P CLAWSON SPRING ST A-3 36 150S 080E 4300730635 12856 State GW P CLAWSON SPRING ST A-3 36 150S 080E 4300730635 12856 State GW P CLAWSON SPRING ST A-3 36 150S 080E 4300730636 13001 State GW P CLAWSON SPRING ST D-5 31 150S 080E 4300730637 12844 State GW P CLAWSON SPRING ST D-6 31 150S 090E 4300730642 12852 State GW P CLAWSON SPRING ST D-6 31 150S 090E 4300730643 12847 State GW P CLAWSON SPRING ST D-7 31 150S 090E 4300730644 12849 State GW P HELPER FED A-5 HELPER FED A-7 22 130S 100E 4300730677 13010 Federal GW P HELPER FED B-16 48 HELPER FED B-16 28 130S 100E 4300730681 13016 Federal GW P HELPER FED C-2 24 130S 100E 4300730681 13016 Federal GW P HELPER FED C-7 21 130S 100E 4300730681 13016 Federal GW P HELPER FED C-7 21 130S 100E 4300730681 13016 Federal GW P HELPER FED C-7 21 130S 100E 4300730681 13016 Federal GW P HELPER FED C-7 21 130S 100E 4300730681 13016 Federal GW P HELPER FED C-7 21 130S 100E 4300730681 13016 Federal GW P HELPER FED C-7 21 130S 100E 4300730681 13016 Federal GW P HELPER FED C-7 21 130S 100E 4300730685 13245 Federal GW P HELPER FED D-10 25 130S 100E 4300730687 12840 FED P FED				100E	4300730593	12649	Federal	GW	P
HELPER FED D-8   35   130S   100E   4300730595   12652   Federal   GW   P		26	130S	100E	4300730594	12651	Federal	GW	P
CLAWSON SPRING ST A-1         36         150S         080E         4300730597         12618         State         GW         P           HELPER ST E-4         36         130S         100E         4300730598         12825         State         GW         P           HELPER ST A-16         11         140S         100E         4300730603         12638         State         GW         P           CHUBBUCK A-2         06         140S         100E         4300730604         12648         Fee         GW         P           CLAWSON SPRING ST A-2         36         150S         080E         4300730635         12856         State         GW         P           CLAWSON SPRING ST A-3         36         150S         080E         4300730637         12844         State         GW         P           CLAWSON SPRING ST D-5         31         150S         090E         4300730642         12852         State         GW         P           CLAWSON SPRING ST D-6         31         150S         090E         4300730641         12847         State         GW         P           CLAWSON SPRING ST D-7         31         150S         090E         4300730641         12849         State		35	130S	100E	4300730595	12652	Federal	GW	P
HELPER ST E-4  HELPER ST A-16  HELPER ST A-16  CHUBBUCK A-2  O6 140S  100E  4300730603  12638  State  GW  P  CHUBBUCK A-2  O6 140S  100E  4300730604  12648  Fee  GW  P  CLAWSON SPRING ST A-2  36 150S  080E  4300730635  12856  State  GW  P  CLAWSON SPRING ST A-3  36 150S  080E  4300730635  12856  State  GW  P  CLAWSON SPRING ST A-4  36 150S  080E  4300730636  13001  State  GW  P  CLAWSON SPRING ST A-4  36 150S  080E  4300730637  12844  State  GW  P  CLAWSON SPRING ST D-5  31 150S  090E  4300730642  12852  State  GW  P  CLAWSON SPRING ST D-6  31 150S  090E  4300730643  12847  State  GW  P  CLAWSON SPRING ST D-7  31 150S  090E  4300730644  12849  State  GW  P  HELPER FED A-7  HELPER FED A-7  HELPER FED B-15  28 130S  100E  4300730677  13010  Federal  GW  P  HELPER FED B-16  28 130S  100E  4300730687  13015  Federal  GW  P  HELPER FED C-2  24 130S  100E  4300730681  13016  Federal  GW  P  HELPER FED C-7  21 130S  100E  4300730685  13203  Federal  GW  P  HELPER FED D-10  25 130S  100E  4300730687  13292  Federal  GW  P  HELPER FED D-11  25 130S  100E  4300730687  12992  Federal  GW  P  HELPER FED D-12  25 130S  100E  4300730688  13005  Federal  GW  P  HELPER FED D-12		36	150S	080E	4300730597	12618	State	GW	P
HELPER ST A-16 CHUBBUCK A-2 06 140S 100E 4300730603 12638 State GW P CLAWSON SPRING ST A-2 36 150S 080E 4300730604 12648 Fee GW P CLAWSON SPRING ST A-2 36 150S 080E 4300730635 12856 State GW P CLAWSON SPRING ST A-3 36 150S 080E 4300730636 13001 State GW P CLAWSON SPRING ST A-4 36 150S 080E 4300730637 12844 State GW P CLAWSON SPRING ST D-5 31 150S 090E 4300730642 12852 State GW P CLAWSON SPRING ST D-6 31 150S 090E 4300730643 12847 State GW P CLAWSON SPRING ST D-7 31 150S 090E 4300730644 12849 State GW P HELPER FED A-5 23 130S 100E 4300730677 13010 Federal GW P HELPER FED B-15 28 130S 100E 4300730678 13346 Federal GW P HELPER FED B-16 28 130S 100E 4300730680 13203 Federal GW P HELPER FED C-2 24 130S 100E 4300730681 13016 Federal GW P HELPER FED C-7 21 130S 100E 4300730682 13012 Federal GW P HELPER FED C-7 21 130S 100E 4300730684 13204 Federal GW P HELPER FED D-9 25 130S 100E 4300730685 13245 Federal GW P HELPER FED D-10 25 130S 100E 4300730687 12992 Federal GW P HELPER FED D-11 25 130S 100E 4300730687 12992 Federal GW P HELPER FED D-11 25 130S 100E 4300730687 12992 Federal GW P HELPER FED D-11		36	130S	100E	4300730598	12825	State	GW	P
CHUBBUCK A-2 06 140S 100E 4300730604 12648 Fee GW P CLAWSON SPRING ST A-2 36 150S 080E 4300730635 12856 State GW P CLAWSON SPRING ST A-3 36 150S 080E 4300730636 13001 State GW P CLAWSON SPRING ST A-4 36 150S 080E 4300730636 13001 State GW P CLAWSON SPRING ST D-5 31 150S 090E 4300730637 12844 State GW P CLAWSON SPRING ST D-6 31 150S 090E 4300730642 12852 State GW P CLAWSON SPRING ST D-7 31 150S 090E 4300730643 12847 State GW P CLAWSON SPRING ST D-7 31 150S 090E 4300730644 12849 State GW P HELPER FED A-5 23 130S 100E 4300730677 13010 Federal GW P HELPER FED B-15 28 130S 100E 4300730678 13346 Federal GW P HELPER FED B-16 28 130S 100E 4300730679 13015 Federal GW P HELPER FED C-2 24 130S 100E 4300730680 13203 Federal GW P HELPER FED C-4 24 130S 100E 4300730681 13016 Federal GW P HELPER FED C-7 21 130S 100E 4300730681 13016 Federal GW P HELPER FED C-7 21 130S 100E 4300730681 13012 Federal GW P HELPER FED D-9 25 130S 100E 4300730685 13245 Federal GW P HELPER FED D-10 25 130S 100E 4300730687 12992 Federal GW P HELPER FED D-10 25 130S 100E 4300730687 12992 Federal GW P HELPER FED D-11 25 130S 100E 4300730688 13005 Federal GW P HELPER FED D-12 25 130S 100E 4300730688 13005 Federal GW P		11	140S	100E	4300730603	12638	State	GW	P
CLAWSON SPRING ST A-2         36         150S         080E         4300730635         12856         State         GW         P           CLAWSON SPRING ST A-3         36         150S         080E         4300730636         13001         State         GW         P           CLAWSON SPRING ST A-4         36         150S         080E         4300730637         12844         State         GW         P           CLAWSON SPRING ST D-5         31         150S         090E         4300730642         12852         State         GW         P           CLAWSON SPRING ST D-6         31         150S         090E         4300730643         12847         State         GW         P           CLAWSON SPRING ST D-7         31         150S         090E         4300730644         12849         State         GW         P           HELPER FED A-5         23         130S         100E         4300730677         13010         Federal         GW         P           HELPER FED B-15         28         130S         100E         4300730679         13015         Federal         GW         P           HELPER FED C-2         24         130S         100E         4300730680         13203         Feder		06	140S	100E	4300730604	12648	Fee	GW	P
CLAWSON SPRING ST A-4         36         150S         080E         4300730637         12844         State         GW         P           CLAWSON SPRING ST D-5         31         150S         090E         4300730642         12852         State         GW         P           CLAWSON SPRING ST D-6         31         150S         090E         4300730643         12847         State         GW         P           CLAWSON SPRING ST D-7         31         150S         090E         4300730644         12849         State         GW         P           HELPER FED A-5         23         130S         100E         4300730677         13010         Federal         GW         P           HELPER FED A-7         22         130S         100E         4300730678         13346         Federal         GW         P           HELPER FED B-15         28         130S         100E         4300730679         13015         Federal         GW         P           HELPER FED B-16         28         130S         100E         4300730680         13203         Federal         GW         P           HELPER FED C-2         24         130S         100E         4300730681         13016         Federal		36	150S	080E	4300730635	12856	State	GW	P
CLAWSON SPRING ST A-4         36         150S         080E         4300730637         12844         State         GW         P           CLAWSON SPRING ST D-5         31         150S         090E         4300730642         12852         State         GW         P           CLAWSON SPRING ST D-6         31         150S         090E         4300730643         12847         State         GW         P           CLAWSON SPRING ST D-7         31         150S         090E         4300730644         12849         State         GW         P           HELPER FED A-5         23         130S         100E         4300730677         13010         Federal         GW         P           HELPER FED A-7         22         130S         100E         4300730678         13346         Federal         GW         P           HELPER FED B-16         28         130S         100E         4300730680         13203         Federal         GW         P           HELPER FED C-2         24         130S         100E         4300730681         13016         Federal         GW         P           HELPER FED C-7         21         130S         100E         4300730684         13204         Federal	CLAWSON SPRING ST A-3	36	150S	080E	4300730636	13001	State	GW	P
CLAWSON SPRING ST D-5         31         150S         090E         4300730642         12852         State         GW         P           CLAWSON SPRING ST D-6         31         150S         090E         4300730643         12847         State         GW         P           CLAWSON SPRING ST D-7         31         150S         090E         4300730644         12849         State         GW         P           HELPER FED A-5         23         130S         100E         4300730677         13010         Federal         GW         P           HELPER FED A-7         22         130S         100E         4300730678         13346         Federal         GW         P           HELPER FED B-15         28         130S         100E         4300730679         13015         Federal         GW         P           HELPER FED B-16         28         130S         100E         4300730680         13203         Federal         GW         P           HELPER FED C-2         24         130S         100E         4300730681         13016         Federal         GW         P           HELPER FED C-7         21         130S         100E         4300730684         13204         Federal		36	150S	080E	4300730637	12844	State	GW	P
CLAWSON SPRING ST D-7         31         150S         090E         4300730644         12849         State         GW         P           HELPER FED A-5         23         130S         100E         4300730677         13010         Federal         GW         P           HELPER FED A-7         22         130S         100E         4300730678         13346         Federal         GW         P           HELPER FED B-15         28         130S         100E         4300730679         13015         Federal         GW         P           HELPER FED B-16         28         130S         100E         4300730680         13203         Federal         GW         P           HELPER FED C-2         24         130S         100E         4300730681         13016         Federal         GW         P           HELPER FED C-7         21         130S         100E         4300730682         13012         Federal         GW         P           HELPER FED D-9         25         130S         100E         4300730685         13245         Federal         GW         P           HELPER FED D-10         25         130S         100E         4300730687         12992         Federal         GW<	CLAWSON SPRING ST D-5	31	150S	090E	4300730642	12852	State	GW	P
CLAWSON SPRING ST D-7         31         150S         090E         4300730644         12849         State         GW         P           HELPER FED A-5         23         130S         100E         4300730677         13010         Federal         GW         P           HELPER FED A-7         22         130S         100E         4300730678         13346         Federal         GW         P           HELPER FED B-15         28         130S         100E         4300730679         13015         Federal         GW         P           HELPER FED B-16         28         130S         100E         4300730680         13203         Federal         GW         P           HELPER FED C-2         24         130S         100E         4300730681         13016         Federal         GW         P           HELPER FED C-7         21         130S         100E         4300730684         13204         Federal         GW         P           HELPER FED D-9         25         130S         100E         4300730685         13245         Federal         GW         P           HELPER FED D-10         25         130S         100E         4300730686         12993         Federal         GW<	CLAWSON SPRING ST D-6	31	150S	090E	4300730643	12847	State	GW	P
HELPER FED A-7 HELPER FED B-15 100E HELPER FED B-15 100E HELPER FED B-16 100E HELPER FED C-2 100E HELPER FED C-4 HELPER FED C-4 HELPER FED C-7 1130S 100E HELPER FED B-16 130S 100E HELPER FED B-16 130S 100E HELPER FED B-16 HELPER FED B	CLAWSON SPRING ST D-7	31	150S	090E	4300730644	12849	State	GW	P
HELPER FED B-15  28 130S 100E 4300730679 13015 Federal GW P HELPER FED B-16  28 130S 100E 4300730680 13203 Federal GW P HELPER FED C-2  24 130S 100E 4300730681 13016 Federal GW P HELPER FED C-4  24 130S 100E 4300730682 13012 Federal GW P HELPER FED C-7  21 130S 100E 4300730684 13204 Federal GW P HELPER FED D-9  25 130S 100E 4300730685 13245 Federal GW P HELPER FED D-10  25 130S 100E 4300730686 12993 Federal GW P HELPER FED D-11  25 130S 100E 4300730687 12992 Federal GW P HELPER FED D-12  25 130S 100E 4300730688 13005 Federal GW P	HELPER FED A-5	23	130S	100E	4300730677	13010	Federal	GW	
HELPER FED B-16  28 130S 100E 4300730680 13203 Federal GW P HELPER FED C-2  24 130S 100E 4300730681 13016 Federal GW P HELPER FED C-4  24 130S 100E 4300730682 13012 Federal GW P HELPER FED C-7  21 130S 100E 4300730684 13204 Federal GW P HELPER FED D-9  25 130S 100E 4300730685 13245 Federal GW P HELPER FED D-10  25 130S 100E 4300730686 12993 Federal GW P HELPER FED D-11  25 130S 100E 4300730687 12992 Federal GW P HELPER FED D-12  25 130S 100E 4300730688 13005 Federal GW P	HELPER FED A-7	22	130S	100E	4300730678	13346	Federal	GW	P
HELPER FED C-2  24 130S 100E 4300730681 13016 Federal GW P HELPER FED C-4  424 130S 100E 4300730682 13012 Federal GW P HELPER FED C-7  4300730684 13204 Federal GW P HELPER FED D-9  4300730685 13245 Federal GW P HELPER FED D-10  4300730686 12993 Federal GW P HELPER FED D-11  4300730687 12992 Federal GW P HELPER FED D-12  4300730688 13005 Federal GW P HELPER FED D-12  4300730688 13005 Federal GW P	HELPER FED B-15	28	130S	100E	4300730679	13015	Federal	GW	P
HELPER FED C-4       24       130S       100E       4300730682       13012       Federal       GW       P         HELPER FED C-7       21       130S       100E       4300730684       13204       Federal       GW       P         HELPER FED D-9       25       130S       100E       4300730685       13245       Federal       GW       P         HELPER FED D-10       25       130S       100E       4300730686       12993       Federal       GW       P         HELPER FED D-11       25       130S       100E       4300730687       12992       Federal       GW       P         HELPER FED D-12       25       130S       100E       4300730688       13005       Federal       GW       P	HELPER FED B-16	28	130S	100E	4300730680	13203	Federal	GW	P
HELPER FED C-7       21       130S       100E       4300730684       13204       Federal       GW       P         HELPER FED D-9       25       130S       100E       4300730685       13245       Federal       GW       P         HELPER FED D-10       25       130S       100E       4300730686       12993       Federal       GW       P         HELPER FED D-11       25       130S       100E       4300730687       12992       Federal       GW       P         HELPER FED D-12       25       130S       100E       4300730688       13005       Federal       GW       P	HELPER FED C-2	24	130S	100E	4300730681	13016	Federal	GW	
HELPER FED C-7       21       130S       100E       4300730684       13204       Federal       GW       P         HELPER FED D-9       25       130S       100E       4300730685       13245       Federal       GW       P         HELPER FED D-10       25       130S       100E       4300730686       12993       Federal       GW       P         HELPER FED D-11       25       130S       100E       4300730687       12992       Federal       GW       P         HELPER FED D-12       25       130S       100E       4300730688       13005       Federal       GW       P		24	130S	100E	4300730682	13012	Federal		
HELPER FED D-9       25       130S       100E       4300730685       13245       Federal       GW       P         HELPER FED D-10       25       130S       100E       4300730686       12993       Federal       GW       P         HELPER FED D-11       25       130S       100E       4300730687       12992       Federal       GW       P         HELPER FED D-12       25       130S       100E       4300730688       13005       Federal       GW       P		21	130S	100E	4300730684	13204	Federal	GW	
HELPER FED D-10       25       130S       100E       4300730686       12993       Federal       GW       P         HELPER FED D-11       25       130S       100E       4300730687       12992       Federal       GW       P         HELPER FED D-12       25       130S       100E       4300730688       13005       Federal       GW       P			130S	100E	4300730685	13245	Federal	GW	
HELPER FED D-11         25         130S         100E         4300730687         12992         Federal         GW         P           HELPER FED D-12         25         130S         100E         4300730688         13005         Federal         GW         P					4300730686	12993	Federal	GW	
HELPER FED D-12 25 130S 100E 4300730688 13005 Federal GW P				100E	4300730687	12992	Federal	GW	P
					4300730688	13005	Federal	GW	P
	HELPER FED E-4	29	130S	100E	4300730689	13229	Federal	GW	P

## Anadarko Petroleum Corporation (N0035) to Anadarko E&P Onshore, LLC (N3940) Effective 1-April-2013

					Lease	Well	Well
Well Name Sec '	Twnshp	Range	API	Entity No.	Type	Type	status
	130S	100E	4300730692	13009	Federal	GW	P
HELPER FED C-5 24	130S	100E	4300730693	13013	Federal	GW	P
HELPER FED G-1 30	130S	11 <b>0</b> E	4300730694	13006	Federal	GW	P
	130S	110E	4300730695	13007	Federal	GW	P
	130S	110E	4300730696	13002	Federal	GW	P
	130S	110E	4300730697	13003	Federal	GW	P
	140S	100E	4300730698	12831	Federal	GW	P
	140S	100E	4300730699	12833	Federal	GW	P
	150S	090E	4300730701	12851	State	GW	P
	130S	100E	4300730702	13011	Federal	GW	P
CLAWSON SPRING ST J-1 35	150S	080E	4300730726	13299	Fee	GW	P
	150S	080E	4300730727	13325	Fee	GW	P
	150S	080E	4300730728	12958	Fee	GW	P
	150S	080E	4300730737	12959	Fee	GW	P
	130S	110E	4300730770	13655	Federal	GW	P
	130S	11 <b>0</b> E	4300730771	13656	Federal	GW	P
	130S	110E	4300730772	13657	Federal	GW	P
	130S	110E	4300730773	13658	Federal	GW	P
	140S	110E	4300730774	13348	Fee	GW	P
<del> </del>	130S	100E	4300730776	13624	Federal	GW	P
	130S	100E	4300730781	13347	Fee	GW	P
	130S	100E	4300730868	13628	Federal	GW	P
	130S	100E	4300730869	13625	Federal	GW	P
<del></del>	130S	100E	4300730870	13631	Federal	GW	P
	130S	100E	4300730871	13629	Federal	GW	P
	130S	100E	4300730872	13622	Fee	GW	P
	130S	100E	4300730873	13630	Federal	GW	P
<del></del>	130S	100E	4300730886	13783	Fee	GW	P
	130S	100E	4300730914	13794	Fee	GW	P
<del></del>	130S	100E	4300730915	13795	Fee	GW	P
	130S	100E	4300730923	13798	Fee	GW	P
<del></del>	140S	100E	4300750070	17824	State	GW	P
	140S	100E	4300750071	17827	State	GW	P
<del></del>	130S	100E	4300750072	17825	State	GW	P
<del></del>	130S	100E	4300750075	17826	Fee	GW	P
	160S	090E	4301530392	12960	State	GW	P
<del></del>	160S	090E	4301530394	12964	State	GW	P
<del></del>	160S	090E	4301530403	12965	State	GW	P
<del></del>	160S	090E	4301530404	12966	State	GW	P
	160S	090E	4301530405	12961	State	GW	P
<del></del>	160S	090E	4301530406	12962	State	GW	P
	160S	080E	4301530410		State	GW	P
<del></del>	160S	080E	4301530427		State	GW	P
	160S	080E	4301530428		State	GW	P
<del></del>	160S	080E	4301530429		State	GW	P
	160S	080E	4301530430		State	GW	P
	160S	080E	4301530431	12963	State	GW	P
<del></del>	160S	080E	4301530432		State	GW	P
	160S	080E	4301530433		State	GW	P
	160S	080E	4301530434		State	GW	P

## Anadarko Petroleum Corporation (N0035) to Anadarko E&P Onshore, LLC (N3940) Effective1-April-2013

Name							Lease	Well	Well
CLAWSON SPRING ST B-7  CLAWSON SPRING ST C-6  14  160S  080E  4301530461  13355  State  GW  P  CLAWSON SPRING ST C-3  12  160S  080E  4301530463  12968  State  GW  P  CLAWSON SPRING ST C-3  12  160S  080E  4301530463  12968  State  GW  P  CLAWSON SPRING ST B-6  11  160S  080E  4301530465  12969  State  GW  P  CLAWSON SPRING ST H-1  13  160S  080E  4301530466  13323  State  GW  P  CLAWSON SPRING ST H-2  13  160S  080E  4301530466  13323  State  GW  P  CLAWSON SPRING ST H-1  10  160S  080E  4301530466  13323  State  GW  P  CLAWSON SPRING ST IPA-1  10  160S  080E  4301530466  13323  State  GW  P  CLAWSON SPRING ST IPA-1  10  160S  080E  4301530466  13295  State  GW  P  CLAWSON SPRING ST IPA-2  15  160S  080E  4301530469  13200  Fee  GW  P  CLAWSON SPRING ST G-1  20  160S  080E  4301530470  12977  State  GW  P  CLAWSON SPRING ST G-1  20  160S  080E  4301530471  13014  State  GW  P  CLAWSON SPRING ST F-2  03  160S  080E  4301530472  13282  State  GW  P  CLAWSON SPRING ST F-3  03  160S  080E  4301530473  13278  State  GW  P  CLAWSON SPRING ST G-1  20  160S  080E  4301530473  13278  State  GW  P  CLAWSON SPRING ST G-2  20  160S  080E  4301530473  13278  State  GW  P  CLAWSON SPRING ST M-1  20  160S  080E  4301530473  13278  State  GW  P  CLAWSON SPRING ST G-1  20  160S  080E  4301530473  13278  State  GW  P  CLAWSON SPRING ST G-2  20  160S  080E  4301530473  13278  State  GW  P  CLAWSON SPRING ST M-1  20  160S  080E  4301530473  13278  State  GW  P  CLAWSON SPRING ST M-1  20  160S  080E  4301530473  13278  State  GW  P  CLAWSON SPRING ST M-1  20  160S  080E  4301530473  13278  State  GW  P  CLAWSON SPRING ST M-1  20  160S  080E  4301530473  13278  State  GW  P  CLAWSON SPRING ST M-1  20  160S  080E  4301530473  13272  State  GW  P  CLAWSON SPRING ST M-1  20  160S  080E  4301530473  13272  State  GW  P  CLAWSON SPRING ST M-1  20  160S  080E  4301530473  13272  State  GW  P  CLAWSON SPRING ST M-1  20  160S  080E  4301530473  13272  State  GW  P  CLAWSON SPRING ST M-1  20  160S  080E  4301530473  13095  State  GW  P  CLA	Well Name	Sec	Twnshp	Range	API	Entity No.	Type	Type	status
CLAWSON SPRING ST C-6  14 160S  080E  4301530461  13355  State  GW  P  CLAWSON SPRING ST C-3  12 160S  080E  4301530463  12968  State  GW  P  CLAWSON SPRING ST B-6  11 160S  080E  4301530465  12969  State  GW  P  CLAWSON SPRING ST H-1  13 160S  080E  4301530465  12969  State  GW  P  CLAWSON SPRING ST H-1  13 160S  080E  4301530467  12955  State  GW  P  CLAWSON SPRING ST H-2  13 160S  080E  4301530467  12955  State  GW  P  CLAWSON SPRING ST IPA-1  10 160S  080E  4301530467  12955  State  GW  P  CLAWSON SPRING ST IPA-2  15 160S  080E  4301530468  12956  Fee  GW  P  CLAWSON SPRING ST IPA-2  15 160S  080E  4301530470  13201  State  GW  P  CLAWSON SPRING ST G-1  02 160S  080E  4301530471  13014  State  GW  P  CLAWSON SPRING ST F-2  03 160S  080E  4301530471  13014  State  GW  P  CLAWSON SPRING ST F-1  03 160S  080E  4301530471  13014  State  GW  P  CLAWSON SPRING ST F-1  03 160S  080E  4301530472  13282  State  GW  P  CLAWSON SPRING ST F-1  03 160S  080E  4301530471  13014  State  GW  P  CLAWSON SPRING ST F-1  03 160S  080E  4301530471  13052  State  GW  P  CLAWSON SPRING ST F-1  03 160S  080E  4301530471  13052  State  GW  P  CLAWSON SPRING ST F-2  03 160S  080E  4301530471  13052  State  GW  P  CLAWSON SPRING ST F-1  03 160S  080E  4301530472  13282  State  GW  P  CLAWSON SPRING ST F-2  03 160S  080E  4301530473  13278  State  GW  P  CLAWSON SPRING ST F-2  03 160S  080E  4301530471  13052  State  GW  P  CLAWSON SPRING ST K-1  02 160S  080E  4301530472  13282  State  GW  P  CLAWSON SPRING ST K-1  02 160S  080E  4301530472  13282  State  GW  P  CLAWSON SPRING ST K-2  03 160S  080E  4301530472  13282  State  GW  P  CLAWSON SPRING ST K-3  10 160S  080E  4301530471  13052  State  GW  P  CLAWSON SPRING ST K-1  02 160S  080E  4301530472  13282  State  GW  P  CLAWSON SPRING ST K-1  02 160S  080E  4301530473  13052  State  GW  P  CLAWSON SPRING ST K-1  02 160S  080E  4301530473  13052  State  GW  P  CLAWSON SPRING ST K-1  02 160S  080E  4301530472  13282  State  GW  P  CLAWSON SPRING ST K-2  03 16SE  04 P  04 P  04 P  04 P	CLAWSON SPRING ST C-4	14	160S	080E	4301530435	13199	State	GW	
CLAWSON SPRING ST C-3         12         160S         080E         4301530463         12968         State         GW         P           CLAWSON SPRING ST B-6         11         160S         080E         4301530465         12969         State         GW         P           CLAWSON SPRING ST H-1         13         160S         080E         4301530466         12925         State         GW         P           CLAWSON SPRING ST H-2         13         160S         080E         4301530467         12955         State         GW         P           CLAWSON SPRING ST H-2         15         160S         080E         4301530468         12956         Fee         GW         P           CLAWSON SPRING ST F-1         10         160S         080E         4301530470         12971         State         GW         P           CLAWSON SPRING ST F-2         07         160S         080E         4301530471         13014         State         GW         P           CLAWSON SPRING ST F-1         03         160S         080E         4301530473         13278         State         GW         P           CLAWSON SPRING ST F-1         03         160S         080E         4301530473         13278	CLAWSON SPRING ST B-7	11	160S	080E	4301530460	12967	State	GW	
CLAWSON SPRING ST B-6         11         160S         080E         4301530465         12969         State         GW         P           CLAWSON SPRING ST H-1         13         160S         080E         4301530466         13323         State         GW         P           CLAWSON SPRING ST H-2         13         160S         080E         4301530467         12955         State         GW         P           CLAWSON SPRING ST IPA-2         15         160S         080E         4301530469         13200         Fee         GW         P           CLAWSON SPRING ST IPA-2         15         160S         080E         4301530469         13200         Fee         GW         P           CLAWSON SPRING ST G-1         02         160S         080E         4301530471         13014         State         GW         P           CLAWSON SPRING ST G-1         03         160S         080E         4301530471         13014         State         GW         P           CLAWSON SPRING ST F-1         03         160S         080E         4301530473         13278         State         GW         P           CLAWSON SPRING ST G-2         02         160S         080E         4301530473         13278	CLAWSON SPRING ST C-6	14	160S	080E	4301530461	13355	State		
CLAWSON SPRING ST H-1	CLAWSON SPRING ST C-3	12	160S	080E	4301530463	12968	State	GW	
CLAWSON SPRING ST H-2	CLAWSON SPRING ST B-6	11	160S	080E	4301530465	12969	State		
CLAWSON SPRING ST IPA-1 10 160S 080E 4301330468 12956 Fee GW P CLAWSON SPRING ST IPA-2 15 160S 080E 4301530469 13200 Fee GW P CLAWSON SPRING ST IPA-2 15 160S 090E 4301530470 12971 State GW P CLAWSON SPRING ST G-1 02 160S 080E 4301530471 13014 State GW P CLAWSON SPRING ST F-2 03 160S 080E 4301530471 13014 State GW P CLAWSON SPRING ST F-2 03 160S 080E 4301530472 13282 State GW P CLAWSON SPRING ST F-1 03 160S 080E 4301530473 13278 State GW P CLAWSON SPRING ST F-1 03 160S 080E 4301530474 13052 State GW P CLAWSON SPRING ST F-1 07 160S 090E 4301530474 13052 State GW P CLAWSON SPRING ST G-2 02 160S 080E 4301530475 12957 State GW P CLAWSON SPRING ST M-1 02 160S 080E 4301530488 13201 State GW P CLAWSON SPRING ST M-1 02 160S 080E 4301530488 13201 State GW P CLAWSON SPRING ST K-1 02 160S 080E 4301530489 13202 State GW P SHIMMIN TRUST 3 14 120S 100E 4300730119 11096 Fee GW PA SHIMMIN TRUST 1 11 120S 100E 4300730119 11096 Fee GW PA SHIMMIN TRUST 1 11 120S 100E 4300730121 11096 Fee GW PA SHIMMIN TRUST 2 14 120S 100E 4300730121 11096 Fee GW PA SHIMMIN TRUST 4 11 120S 100E 4300730123 11096 Fee GW PA ST 9-16 16 120S 100E 4300730123 11096 Fee GW PA ST 9-16 16 120S 100E 4300730132 11402 State GW PA ST 9-16 16 120S 100E 4300730132 11402 State GW PA ST 9-16 16 120S 100E 4300730133 11399 State GW PA ST 9-16 16 120S 100E 4300730132 11402 State GW PA ST 9-16 16 120S 100E 4300730132 11402 State GW PA ST 9-16 16 120S 100E 4300730138 11441 Fee GW PA ST 9-16 16 120S 100E 4300730138 11402 State GW PA ST 9-16 16 120S 100E 4300730138 11407 Fee GW PA ST 9-16 16 120S 100E 4300730138 11402 State GW PA ST 9-16 16 120S 100E 4300730138 11402 State GW PA ST 9-16 16 120S 100E 4300730138 11402 State GW PA ST 9-16 16 120S 100E 4300730138 11402 State GW PA PA ST 9-16 16 120S 100E 4300730138 11402 State GW PA PA PA 9-16 16 120S 100E 4300730141 11273 State GW PA 9-16 16 120S 100E 4300730141 11275 State GW PA 9-16 16 16 120S 100E 4300730141 11275 State GW PA 9-16 16 16 16 16 16 16 16 16 16 16 16 16 1	CLAWSON SPRING ST H-1	13	160S	080E	4301530466	13323	State	GW	
CLAWSON SPRING ST IPA-2 15 160S 080E 4301530469 13200 Fee GW P CLAWSON SPRING ST E-5 07 160S 090E 4301530470 12971 State GW P CLAWSON SPRING ST G-1 02 160S 080E 4301530471 13014 State GW P CLAWSON SPRING ST F-2 03 160S 080E 4301530471 13014 State GW P CLAWSON SPRING ST F-1 03 160S 080E 4301530471 13014 State GW P CLAWSON SPRING ST F-1 03 160S 080E 4301530473 13278 State GW P CLAWSON SPRING ST E-6 07 160S 090E 4301530474 13052 State GW P CLAWSON SPRING ST G-2 02 160S 080E 4301530475 12957 State GW P CLAWSON SPRING ST M-1 02 160S 080E 4301530475 12957 State GW P CLAWSON SPRING ST M-1 02 160S 080E 4301530488 13201 State GW P CLAWSON SPRING ST K-1 02 160S 080E 4301530489 13202 State GW P SHIMMIN TRUST 3 14 120S 100E 4300730119 11096 Fee GW PA SHIMMIN TRUST 1 11 120S 100E 4300730120 11096 Fee GW PA SHIMMIN TRUST 2 14 120S 100E 4300730121 11096 Fee GW PA SHIMMIN TRUST 4 11 120S 100E 4300730121 11096 Fee GW PA ST 9-16 16 120S 100E 4300730123 11096 Fee GW PA ST 9-16 16 120S 100E 4300730132 11402 State GW PA ST 2-16 16 120S 100E 4300730132 11402 State GW PA ST 2-16 16 16 120S 100E 4300730133 11399 State GW PA ST 2-16 16 16 120S 100E 4300730133 11399 State GW PA ST 9-16 16 120S 100E 4300730138 11402 State GW PA ST 9-16 16 120S 100E 4300730161 11402 Fee GW PA ST 9-16 16 120S 100E 4300730165 11407 Fee GW PA ST 9-16 10 10 120S 100E 4300730168 11441 Fee GW PA SLEMAKER A-1 05 120S 100E 4300730168 11441 Fee GW PA SLEMAKER A-1 11 120S 100E 4300730168 11440 Fee GW PA SLEMAKER A-1 11 120S 100E 4300730168 11407 Fee GW PA SLEMAKER A-1 11 120S 100E 4300730168 11407 Fee GW PA SHIMMIN TRUST 12-12 12 120S 100E 4300730168 11503 Fee GW PA BRYNER A-1 11 120S 120E 4300730188 11503 Fee GW PA BRYNER A-1 11 120S 120E 4300730188 11503 Fee GW PA BRYNER A-1 11 120S 120E 4300730168 11503 Fee GW PA BRYNER A-1 11 120S 120E 4300730188 11503 Fee GW PA BRYNER A-1 11 120S 120E 4300730188 11503 Fee GW PA BRYNER A-1 11 120S 120E 4300730188 11503 Fee GW PA BLACKHAWK A-5H 20 130S 100E 4300731683 13008 Federal DP PA BLACKHAWK A-5H 20 130S 100E 4300731683 13	CLAWSON SPRING ST H-2	13	160S	080E	4301530467	12955	State		
CLAWSON SPRING ST E-5 07 160S 090E 4301530470 12971 State GW P CLAWSON SPRING ST G-1 02 160S 080E 4301530471 13014 State GW P CLAWSON SPRING ST F-2 03 160S 080E 4301530472 13282 State GW P CLAWSON SPRING ST F-1 03 160S 080E 4301530473 13278 State GW P CLAWSON SPRING ST F-6 07 160S 090E 4301530473 13278 State GW P CLAWSON SPRING ST G-2 02 160S 080E 4301530474 13052 State GW P CLAWSON SPRING ST G-2 02 160S 080E 4301530475 12957 State GW P CLAWSON SPRING ST M-1 02 160S 080E 4301530488 13201 State GW P CLAWSON SPRING ST K-1 02 160S 080E 4301530488 13201 State GW P SHIMMIN TRUST 3 14 120S 100E 4300730119 11096 Fee GW PA SHIMMIN TRUST 1 11 120S 100E 4300730120 11096 Fee GW PA SHIMMIN TRUST 2 14 120S 100E 4300730121 11096 Fee GW PA SHIMMIN TRUST 4 11 120S 100E 4300730123 11096 Fee GW PA ST 9-16 16 120S 100E 4300730123 11096 Fee GW PA ST 2-16 16 120S 100E 4300730133 11399 State GW PA ST 2-16 16 120S 100E 4300730131 11402 State GW PA ST 2-16 16 120S 100E 4300730131 11273 State GW PA ST 2-16 16 120S 100E 4300730131 11273 State GW PA ST 2-16 16 120S 100E 4300730131 11273 State GW PA ST 2-16 16 120S 100E 4300730161 11403 Fee GW PA ST 2-16 16 120S 100E 4300730161 11403 Fee GW PA ST 2-16 16 120S 100E 4300730158 11441 Fee GW PA ST 2-16 16 120S 100E 4300730165 11407 Fee GW PA SLEMAKER A-1 14 120S 100E 4300730165 11441 Fee GW PA SLEMAKER A-1 15 120S 100E 4300730165 11407 Fee GW PA SLEMAKER A-1 15 120S 100E 4300730165 11407 Fee GW PA SHIMMIN TRUST 12-12 12 120S 100E 4300730165 11407 Fee GW PA SHIMMIN TRUST 12-12 12 120S 100E 4300730165 11407 Fee GW PA SHIMMIN TRUST 12-12 12 120S 100E 4300730188 11503 Fee GW PA BRYNER A-1 11 120S 120E 4300730188 11503 Fee GW PA BRYNER A-1 11 120S 120E 4300730185 11420 Fee GW PA BRYNER A-1 11 120S 120E 4300730185 11420 Fee GW PA BRYNER A-1 11 120S 120E 4300730185 11420 Fee GW PA BRYNER A-1 11 120S 120E 4300730188 11503 Fee GW PA BRYNER A-1 11 120S 120E 4300730185 11420 Fee GW PA BRYNER A-1 11 120S 120E 4300730185 11420 Fee GW PA BRYNER A-1 11 120S 120E 4300730185 1140F Fee GW PA BRYNER A-1 11 120S	CLAWSON SPRING ST IPA-1	10	160S	080E	4301530468	12956	Fee		
CLAWSON SPRING ST G-1	CLAWSON SPRING ST IPA-2	15	160S	080E	4301530469	13200	Fee		
CLAWSON SPRING ST F-2 03 160S 080E 4301530472 13282 State GW P CLAWSON SPRING ST F-1 03 160S 080E 4301530473 13278 State GW P CLAWSON SPRING ST E-6 07 160S 090E 4301530474 13052 State GW P CLAWSON SPRING ST G-2 02 160S 080E 4301530475 12957 State GW P CLAWSON SPRING ST M-1 02 160S 080E 4301530475 12957 State GW P CLAWSON SPRING ST K-1 02 160S 080E 4301530488 13201 State GW P CLAWSON SPRING ST K-1 02 160S 080E 4301530489 13202 State GW P SHIMMIN TRUST 3 14 120S 100E 4300730119 11096 Fee GW PA SHIMMIN TRUST 1 11 120S 100E 4300730120 11096 Fee GW PA SHIMMIN TRUST 2 14 120S 100E 4300730121 11096 Fee GW PA SHIMMIN TRUST 4 11 120S 100E 4300730123 11096 Fee GW PA ST 9-16 16 120S 100E 4300730123 11096 Fee GW PA ST 2-16 16 16 120S 100E 4300730133 11399 State GW PA ST 2-16 16 16 120S 100E 4300730133 11399 State GW PA ST 2-16 16 16 120S 100E 4300730133 11399 State GW PA ST 2-16 16 16 120S 100E 4300730158 11441 Fee GW PA SLEMAKER A-1 05 120S 120E 4300730158 11441 Fee GW PA JENSEN 16-10 10 120S 100E 4300730161 11407 Fee GW PA JENSEN 16-10 10 120S 100E 4300730165 11407 Fee GW PA SHIMMIN TRUST 12-12 12 120S 100E 4300730165 11407 Fee GW PA SHIMMIN TRUST 12-12 12 120S 100E 4300730165 11407 Fee GW PA BRYNER A-1 11 120S 120E 4300730168 11420 Fee GW PA BRYNER A-1 11 120S 120E 4300730168 11407 Fee GW PA BRYNER A-1 11 120S 120E 4300730168 11407 Fee GW PA BRYNER A-1 11 120S 120E 4300730168 11407 Fee GW PA BRYNER A-1 11 120S 120E 4300730168 11407 Fee GW PA BRYNER A-1 11 120S 120E 4300730168 11503 Fee GW PA BRYNER A-1 11 120S 120E 4300730168 11503 Fee GW PA BRYNER A-1 11 120S 120E 4300730188 11503 Fee GW PA BRYNER A-1 11 120S 120E 4300730188 11503 Fee D PA BLACKHAWK A-5H 20 130S 100E 4300730167 12978 Fee D PA BLACKHAWK A-5H 20 130S 100E 4300730683 13008 Federal GW S	CLAWSON SPRING ST E-5	07	160S	090E	4301530470	12971	State	GW	P
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SHIMMIN TRUST 3         14         120S         100E         4300730119         11096         Fee         GW         PA           SHIMMIN TRUST 1         11         120S         100E         4300730120         11096         Fee         GW         PA           SHIMMIN TRUST 2         14         120S         100E         4300730121         11096         Fee         GW         PA           SHIMMIN TRUST 4         11         120S         100E         4300730123         11096         Fee         GW         PA           ST 9-16         16         120S         100E         4300730132         11402         State         GW         PA           ST 2-16         16         120S         100E         4300730133         11399         State         GW         PA           MATTS SUMMIT ST A-1         14         120S         090E         4300730158         11441         Fee         GW         PA           SLEMAKER A-1         05         120S         100E         4300730165         11441         Fee         GW         PA           JENSEN 16-10         10         120S         100E         4300730165         11407         Fee         GW         PA <t< td=""><td>CLAWSON SPRING ST M-1</td><td>02</td><td>160S</td><td>080E</td><td>4301530488</td><td>13201</td><td>State</td><td></td><td></td></t<>	CLAWSON SPRING ST M-1	02	160S	080E	4301530488	13201	State		
SHIMMIN TRUST 1         11         120S         100E         4300730120         11096         Fee         GW         PA           SHIMMIN TRUST 2         14         120S         100E         4300730121         11096         Fee         GW         PA           SHIMMIN TRUST 4         11         120S         100E         4300730123         11096         Fee         GW         PA           ST 9-16         16         120S         100E         4300730132         11402         State         GW         PA           ST 2-16         16         120S         100E         4300730133         11399         State         GW         PA           MATTS SUMMIT ST A-1         14         120S         090E         4300730141         11273         State         GW         PA           SLEMAKER A-1         05         120S         120E         4300730158         11441         Fee         GW         PA           JENSEN 16-10         10         120S         100E         4300730161         11403         Fee         GW         PA           SHIMMIN TRUST 12-12         12         120S         100E         4300730165         11407         Fee         GW         PA	CLAWSON SPRING ST K-1	02	160S	080E	4301530489	13202	State		
SHIMMIN TRUST 2         14         120S         100E         4300730121         11096         Fee         GW         PA           SHIMMIN TRUST 4         11         120S         100E         4300730123         11096         Fee         GW         PA           ST 9-16         16         120S         100E         4300730132         11402         State         GW         PA           ST 2-16         16         120S         100E         4300730133         11399         State         GW         PA           MATTS SUMMIT ST A-1         14         120S         090E         4300730141         11273         State         GW         PA           SLEMAKER A-1         05         120S         120E         4300730158         11441         Fee         GW         PA           JENSEN 16-10         10         120S         100E         4300730161         11403         Fee         GW         PA           JENSEN 7-15         15         120S         100E         4300730165         11407         Fee         GW         PA           JENSEN 11-15         15         120S         100E         4300730168         11420         Fee         GW         PA	SHIMMIN TRUST 3	14	120S	100E	4300730119	11096	Fee		
SHIMMIN TRUST 4         11         120S         100E         4300730123         11096         Fee         GW         PA           ST 9-16         16         120S         100E         4300730132         11402         State         GW         PA           ST 2-16         16         120S         100E         4300730133         11399         State         GW         PA           MATTS SUMMIT ST A-1         14         120S         090E         4300730141         11273         State         GW         PA           SLEMAKER A-1         05         120S         120E         4300730158         11441         Fee         GW         PA           JENSEN 16-10         10         120S         100E         4300730161         11403         Fee         GW         PA           JENSEN 7-15         15         120S         100E         4300730165         11407         Fee         GW         PA           SHIMMIN TRUST 12-12         12         120S         100E         4300730168         11420         Fee         GW         PA           JENSEN 11-15         15         120S         100E         4300730175         11425         Fee         GW         PA <tr< td=""><td>SHIMMIN TRUST 1</td><td>11</td><td>120S</td><td>100E</td><td>4300730120</td><td>11096</td><td>Fee</td><td></td><td></td></tr<>	SHIMMIN TRUST 1	11	120S	100E	4300730120	11096	Fee		
ST 9-16         16         120S         100E         4300730132         11402         State         GW         PA           ST 2-16         16         120S         100E         4300730133         11399         State         GW         PA           MATTS SUMMIT ST A-1         14         120S         090E         4300730141         11273         State         GW         PA           SLEMAKER A-1         05         120S         120E         4300730158         11441         Fee         GW         PA           JENSEN 16-10         10         120S         100E         4300730161         11403         Fee         GW         PA           JENSEN 7-15         15         120S         100E         4300730165         11407         Fee         GW         PA           SHIMMIN TRUST 12-12         12         120S         100E         4300730168         11420         Fee         GW         PA           JENSEN 11-15         15         120S         100E         4300730175         11425         Fee         GW         PA           BRYNER A-1         11         120S         120E         4300730188         11503         Fee         GW         PA	SHIMMIN TRUST 2	14	120S	100E	4300730121	11096	Fee	GW	PA
ST 2-16         16         120S         100E         4300730133         11399         State         GW         PA           MATTS SUMMIT ST A-1         14         120S         090E         4300730141         11273         State         GW         PA           SLEMAKER A-1         05         120S         120E         4300730158         11441         Fee         GW         PA           JENSEN 16-10         10         120S         100E         4300730161         11403         Fee         GW         PA           JENSEN 7-15         15         120S         100E         4300730165         11407         Fee         GW         PA           SHIMMIN TRUST 12-12         12         120S         100E         4300730168         11420         Fee         GW         PA           JENSEN 11-15         15         120S         100E         4300730175         11425         Fee         GW         PA           BRYNER A-1         11         120S         120E         4300730188         11503         Fee         GW         PA           BLACKHAWK A-1         20         130S         100E         4300730885         13798         Fee         D         PA	SHIMMIN TRUST 4	11	120S	100E	4300730123	11096	Fee		
MATTS SUMMIT ST A-1         14         120S         090E         4300730141         11273         State         GW         PA           SLEMAKER A-1         05         120S         120E         4300730158         11441         Fee         GW         PA           JENSEN 16-10         10         120S         100E         4300730161         11403         Fee         GW         PA           JENSEN 7-15         15         120S         100E         4300730165         11407         Fee         GW         PA           SHIMMIN TRUST 12-12         12         120S         100E         4300730168         11420         Fee         GW         PA           JENSEN 11-15         15         120S         100E         4300730175         11425         Fee         GW         PA           BRYNER A-1         11         120S         120E         4300730188         11503         Fee         GW         PA           BLACKHAWK A-1         20         130S         100E         4300730885         13798         Fee         D         PA           BLACKHAWK A-5H         20         130S         100E         4300730683         13008         Fee         D         PA      <	ST 9-16	16	120S	100E	4300730132	11402	State		
SLEMAKER A-1         05         120S         120E         4300730158         11441         Fee         GW         PA           JENSEN 16-10         10         120S         100E         4300730161         11403         Fee         GW         PA           JENSEN 7-15         15         120S         100E         4300730165         11407         Fee         GW         PA           SHIMMIN TRUST 12-12         12         120S         100E         4300730168         11420         Fee         GW         PA           JENSEN 11-15         15         120S         100E         4300730175         11425         Fee         GW         PA           BRYNER A-1         11         120S         120E         4300730188         11503         Fee         GW         PA           BLACKHAWK A-1         20         130S         100E         4300730885         13798         Fee         D         PA           BLACKHAWK A-5H         20         130S         100E         4300731402         17029         Fee         D         PA           CLAWSON SPRING ST SWD 3         06         160S         090E         4301530476         12978         State         D         PA	ST 2-16	16	120S	100E	4300730133	11399	State		
JENSEN 16-10 10 120S 100E 4300730161 11403 Fee GW PA  JENSEN 7-15 15 120S 100E 4300730165 11407 Fee GW PA  SHIMMIN TRUST 12-12 12 120S 100E 4300730168 11420 Fee GW PA  JENSEN 11-15 15 120S 100E 4300730175 11425 Fee GW PA  BRYNER A-1 11 120S 120E 4300730188 11503 Fee GW PA  BRYNER A-1X (RIG SKID) 11 120S 120E 4300730209 11503 Fee GW PA  BLACKHAWK A-1 20 130S 100E 4300730885 13798 Fee D PA  BLACKHAWK A-5H 20 130S 100E 4300731402 17029 Fee D PA  CLAWSON SPRING ST SWD 3 06 160S 090E 4301530476 12978 State D PA  HELPER FED C-6 21 130S 100E 4300730683 13008 Federal GW S	MATTS SUMMIT ST A-1	14	120S	090E	4300730141				
JENSEN 7-15  15  120S  100E  4300730165  11407  Fee  GW  PA  SHIMMIN TRUST 12-12  12  120S  100E  4300730168  11420  Fee  GW  PA  JENSEN 11-15  15  120S  100E  4300730168  11420  Fee  GW  PA  JENSEN 11-15  15  120S  100E  4300730175  11425  Fee  GW  PA  BRYNER A-1  11  120S  120E  4300730188  11503  Fee  GW  PA  BRYNER A-1X (RIG SKID)  11  120S  120E  4300730209  11503  Fee  GW  PA  BLACKHAWK A-1  20  130S  100E  4300730209  11503  Fee  D  PA  BLACKHAWK A-5H  20  130S  100E  4300730885  13798  Fee  D  PA  CLAWSON SPRING ST SWD 3  06  160S  090E  4301530476  12978  State  D  PA  HELPER FED C-6  21  130S  100E  4300730683  13008  Federal  GW  S	SLEMAKER A-1	05	120S	1 <b>20</b> E	4300730158	11441	Fee		
SHIMMIN TRUST 12-12         12         120S         100E         4300730168         11420         Fee         GW         PA           JENSEN 11-15         15         120S         100E         4300730175         11425         Fee         GW         PA           BRYNER A-1         11         120S         120E         4300730188         11503         Fee         GW         PA           BRYNER A-1X (RIG SKID)         11         120S         120E         4300730209         11503         Fee         GW         PA           BLACKHAWK A-1         20         130S         100E         4300730885         13798         Fee         D         PA           BLACKHAWK A-5H         20         130S         100E         4300731402         17029         Fee         D         PA           CLAWSON SPRING ST SWD 3         06         160S         090E         4301530476         12978         State         D         PA           HELPER FED C-6         21         130S         100E         4300730683         13008         Federal         GW         S	JENSEN 16-10	10	120S	100E	4300730161				
JENSEN 11-15 15 120S 100E 4300730175 11425 Fee GW PA BRYNER A-1 11 120S 120E 4300730188 11503 Fee GW PA BRYNER A-1X (RIG SKID) 11 120S 120E 4300730209 11503 Fee GW PA BLACKHAWK A-1 20 130S 100E 4300730885 13798 Fee D PA BLACKHAWK A-5H 20 130S 100E 4300731402 17029 Fee D PA CLAWSON SPRING ST SWD 3 06 160S 090E 4301530476 12978 State D PA HELPER FED C-6 21 130S 100E 4300730683 13008 Federal GW S	JENSEN 7-15	15	120S	100E	4300730165				
BRYNER A-1 BRYNER A-1	SHIMMIN TRUST 12-12	12	120S	100E	4300730168				
BRYNER A-1X (RIG SKID) 11 120S 120E 4300730209 11503 Fee GW PA BLACKHAWK A-1 20 130S 100E 4300730885 13798 Fee D PA BLACKHAWK A-5H 20 130S 100E 4300731402 17029 Fee D PA CLAWSON SPRING ST SWD 3 06 160S 090E 4301530476 12978 State D PA HELPER FED C-6 21 130S 100E 4300730683 13008 Federal GW S	JENSEN 11-15	15	120S	100E	4300730175				
BLACKHAWK A-1 20 130S 100E 4300730885 13798 Fee D PA BLACKHAWK A-5H 20 130S 100E 4300731402 17029 Fee D PA CLAWSON SPRING ST SWD 3 06 160S 090E 4301530476 12978 State D PA HELPER FED C-6 21 130S 100E 4300730683 13008 Federal GW S	BRYNER A-1	11	120S	120E	4300730188	11503	Fee		
BLACKHAWK A-5H 20 130S 100E 4300731402 17029 Fee D PA CLAWSON SPRING ST SWD 3 06 160S 090E 4301530476 12978 State D PA HELPER FED C-6 21 130S 100E 4300730683 13008 Federal GW S	BRYNER A-1X (RIG SKID)	11	120S	120E	4300730209	11503	Fee		
CLAWSON SPRING ST SWD 3       06       160S       090E       4301530476       12978       State       D       PA         HELPER FED C-6       21       130S       100E       4300730683       13008       Federal       GW       S	BLACKHAWK A-1	20	130S	100E	4300730885				
HELPER FED C-6 21 130S 100E 4300730683 13008 Federal GW S	BLACKHAWK A-5H	20	130S		4300731402				
	<b>CLAWSON SPRING ST SWD 3</b>	06	160S	090E	4301530476				
10 1000 000E 1001500001 10000 CW CW CW	HELPER FED C-6	21	130S	100E					
UTAH 10-415 10 160S 080E 4301530391 12632 State GW 1A	UTAH 10-415	10	160S	080E	4301530391	12632	State	GW	TA

	API Well Number	Well Name	Qtr/Qtr	Section	Township	Range	Mineral Lease Type	Mineral Lease Number	Well Status
1	4300730189	HELPER FED B-1	NESW	33	135	10E	Federal	USA UTU 71392	Producing
2	4300730190	HELPER FED A-1	C-SW	23	135	10E	Federal	USA UTU 58434	Producing
3	4300730213	HELPER FED A-3	SESE	22	135	10E	Federal	USA UTU 58434	Producing
4	4300730214	HELPER FED C-1	SENE	22	135	10E	Federal	USA UTU 71391	Producing
5	4300730215	HELPER FED B-5	NENE	27	135	10E	Federal	USA UTU 71392	Producing
6	4300730216	HELPER FED A-2	NESW	22	135	10E	Federal	USA UTU 58434	Producing
7	4300730286	HELPER FED D-1	SWNE	26	135	10E	Federal	USA UTU 68315	Producing
8	4300730378	HELPER FED F-3	NENE	8	145	10E	Federal	USA UTU 65762	Producing
9	4300730379	HELPER FED F-4	NWNW	9	14S	10E	Federal	USA UTU 65762	Producing
10	4300730508	HELPER FED E-7	SESE	19	135	10E	Federal	USA UTU 77980	Producing
11	4300730530	HELPER FED B-2	SENW	33	135	10E	Federal	USA UTU 71392	Producing
12	4300730531	HELPER FED B-3	NESE	33	135	10E	Federal	USA UTU 71392	Producing
13	4300730532	HELPER FED B-4	NENE	33	135	10E	Federal	USA UTU 71392	Producing
14	4300730533	HELPER FED B-6	NENW	27	135	10E	Federal	USA UTU 71392	Producing
15	4300730534	HELPER FED B-7	NESW	27	135	10E	Federal	USA UTU 71392	Producing
16	4300730535	HELPER FED B-8	SESE	27	135	10E	Federal	USA UTU 71392	Producing
17	4300730536	HELPER FED B-9	SENW	34	135	10E	Federal	USA UTU 71392	Producing
18	4300730537	HELPER FED B-10	NWNE	34	135	10E	Federal	USA UTU 71392	Producing
19	4300730538	HELPER FED B-11	SESW	34	135	10E	Federal	USA UTU 71392	Producing
20	4300730539	HELPER FED B-12	NESE	34	135	10E	Federal	USA UTU 71392	Producing
21	4300730540	HELPER FED B-13	SWSE	28	135	10E	Federal	USA UTU 71392	Producing
22	4300730541	HELPER FED B-14	SWSW	28	135	10E	Federal	USA UTU 71392	Producing
23	4300730542	HELPER FED D-2	SWNW	26	13S	10E	Federal	USA UTU 68315	Producing
24	4300730543	HELPER FED D-3	SESW	26	135	10E	Federal	USA UTU 68315	Producing
25	4300730544	HELPER FED D-4	NWNW	35	135	10E	Federal	USA UTU 68315	Producing
26	4300730545	HELPER FED D-5	SESW	35	135	10E	Federal	USA UTU 68315	Producing
27	4300730546	HELPER FED D-6	NWSE	35	135	10E	Federal	USA UTU 68315	Producing
28	4300730547	HELPER FED E-1	NESE	29	135	10E	Federal	USA UTU 71675	Producing
29	4300730548	HELPER FED E-2	SESW	29	135	10E	Federal	USA UTU 71675	Producing
30	4300730549	HELPER FED H-1	NENW	1	145	10E	Federal	USA UTU 72352	Producing
31	4300730550	HELPER FED H-2	SESW	1	145	10E	Federal	USA UTU_72352	Producing
32	4300730556	OLIVETO FED A-2	NESW	8	145	10E	Federal	USA UTU_65762	Producing
33	4300730557	HELPER FED F-1	SESE	8	145	10E	Federal	USA UTU 65762	Producing
34	4300730558	SMITH FED A-1	NWSW	9	145	10E	Federal	USA UTU 65762	Producing
35	4300730593	HELPER FED A-6	SESE	23	<b>13</b> S	10E	Federal	USA UTU 58434	Producing
36	4300730594	HELPER FED D-7	C-SE	26	135	10E	Federal	USA UTU 68315	Producing
37	4300730595	HELPER FED D-8	NENE	35	135	10E	Federal	USA UTU 68315	Producing
38	4300730677	HELPER FED A-5	NENE	23	13S	10E	Federal	USA UTU 58434	Producing
39	4300730678	HELPER FED A-7	SENW	22	135	1.0E	Federal	USA UTU 58434	Producing
40	4300730679	HELPER FED B-15	SENE	28	135	10E	Federal	USA UTU 71392	Producing
41	4300730680	HELPER FED B-16	SWNW	28	135	10E	Federal	USA UTU 71392	Producing
42	4300730681	HELPER FED C-2	NENW	24	13S	10E	Federal	USA UTU 71391	Producing

	API Well Number	Well Name	Qtr/Qtr	Section	Township	Range	Mineral Lease Type	Mineral Lease Number	Well Status
43	4300730682	HELPER FED C-4	NWSW	24	135	10E	Federal	USA UTU 71391	Producing
44	4300730683	HELPER FED C-6	SWSE	21	135	10E	Federal	USA UTU 71391	Shut-In
45	4300730684	HELPER FED C-7	SESW	21	135	10E	Federal	USA UTU 71391	Producing
46	4300730685	HELPER FED D-9	NWNW	25	135	10E	Federal	USA UTU 68315	Producing
47	4300730686	HELPER FED D-10	SENE	25	135	10E	Federal	USA UTU 68315	Producing
48	4300730687	HELPER FED D-11	SESW	25	135	10E	Federal	USA UTU 68315	Producing
49	4300730688	HELPER FED D-12	SESE	25	135	10E	Federal	USA UTU 68315	Producing
50	4300730689	HELPER FED E-4	NWNE	29	135	10E	Federal	USA UTU 71675	Producing
51	4300730692	HELPER FED A-4	SWNW	23	135	10E	Federal	USA UTU 58434	Producing
52	4300730693	HELPER FED C-5	SWNE	24	135	10E	Federal	USA UTU 71391	Producing
53	4300730694	HELPER FED G-1	C-NW	30	135	11E	Federal	USA UTU 71677	Producing
54	4300730695	HELPER FED G-2	swsw	30	135	11E	Federal	USA UTU 71677	Producing
55	4300730696	HELPER FED G-3	SENW	31	135	11E	Federal	USA UTU 71677	Producing
56	4300730697	HELPER FED G-4	SESW	31	13S	11E	Federal	USA UTU 71677	Producing
57	4300730698	HELPER FED H-3	SWNE	1	145	10E	Federal	USA UTU 72352	Producing
58	4300730699	HELPER FED H-4	NESE	1	145	10E	Federal	USA UTU 72352	Producing
59	4300730702	HELPER FED C-3	SESW	24	135	10E	Federal	USA UTU 71391	Producing
60	4300730770	HELPER FED G-5	SWNE	30	135	11E	Federal	USA UTU 71677	Producing
61	4300730771	HELPER FED G-6	SWSE	30	135	11E	Federal	USA UTU 71677	Producing
62	4300730772	HELPER FED G-7	NWNE	31	135	11E	Federal	USA UTU 71677	Producing
63	4300730773	HELPER FED G-8	NESE	31	135	11E	Federal	USA UTU 71677	Producing
64	4300730776	HELPER FED E-8	SENE	19	135	10E	Federal	USA UTU 77980	Producing
65	4300730868	HELPER FED E-9	SESW	19	135	10E	Federal	USA UTU 77980	Producing
66	4300730869	HELPER FED E-5	swsw	20	135	10E	Federal	USA UTU 71675	Producing
67	4300730870	HELPER FED E-6	SWNW	20	135	10E	Federal	USA UTU 71675	Producing
68	4300730871	HELPER FED E-10	NENW	30	135	10E	Federal	USA UTU 71675	Producing
69	4300730873	HELPER FED E-11	NWNE	30	135	10E	Federal	USA UTU 71675	Producing
70	4300730119	SHIMMIN TRUST 3	SENW	14	12S	10E	Fee (Private)		Plugged and Abandoned
71	4300730120	SHIMMIN TRUST 1	SESE	11	125	10E	Fee (Private)		Plugged and Abandoned
72	4300730121	SHIMMIN TRUST 2	SENE	14	125	10E	Fee (Private)		Plugged and Abandoned
73	4300730123	SHIMMIN TRUST 4	SESW	11	12S	10E	Fee (Private)		Plugged and Abandoned
74	4300730158	SLEMAKER A-1	SWNE	5	125	12E	Fee (Private)		Plugged and Abandoned
75	4300730161	JENSEN 16-10	SESE	10	12S	10E	Fee (Private)		Plugged and Abandoned
76	4300730165	JENSEN 7-15	SWNE	15	12S	10E	Fee (Private)		Plugged and Abandoned
77	4300730168	SHIMMIN TRUST 12-12	NWSW	12	12S	10E	Fee (Private)		Plugged and Abandoned
78	4300730175	JENSEN 11-15	NESW	15	125	10E	Fee (Private)		Plugged and Abandoned
79	4300730188	BRYNER A-1	NESE	11	12S	12E	Fee (Private)		Plugged and Abandoned
80	4300730209	BRYNER A-1X (RIG SKID)	NESE	11	12S	12E	Fee (Private)		Plugged and Abandoned
81	4300730348	BIRCH A-1	NWSW	5	145	10E	Fee (Private)		Producing
82	4300730352	CHUBBUCK A-1	NESE	31	13S	10E	Fee (Private)		Producing
83	4300730353	VEA A-1	SWNW	32	135	10E	Fee (Private)		Producing
84	4300730354	VEA A-2	NENE	32	13S	10E	Fee (Private)		Producing

	API Well Number	Well Name	Qtr/Qtr	Section	Township	Range	Mineral Lease Type	Mineral Lease Number	Well Status
85	4300730355	VEA A-3	SESW	32	135	10E	Fee (Private)		Producing
86	4300730356	VEA A-4	NWSE	32	13S	10E	Fee (Private)		Producing
87	4300730372	BIRCH A-2	NWNW	8	145	10E	Fee (Private)		Producing
88	4300730570	SE INVESTMENTS A-1	NESE	6	145	10E	Fee (Private)		Producing
89	4300730586	HARMOND A-1	SENE	7	145	10E	Fee (Private)		Producing
90	4300730604	CHUBBUCK A-2	SENW	6	14S	10E	Fee (Private)		Producing
91	4300730726	CLAWSON SPRING ST J-1	SESW	35	15\$	8E	Fee (Private)		Producing
92	4300730727	PIERUCCI 1	SENW	35	158	8E	Fee (Private)		Producing
93	4300730728	POTTER ETAL 1	SWNE	35	15\$	8E	Fee (Private)		Producing
94	4300730737	POTTER ETAL 2	NESE	35	158	8E	Fee (Private)		Producing
95	4300730774	GOODALL A-1	NWSW	6	145	11E	Fee (Private)		Producing
96	4300730781	HAUSKNECHT A-1	SWNW	21	135	10E	Fee (Private)		Producing
97	4300730872	SACCOMANNO A-1	NESE	30	135	10E	Fee (Private)		Producing
98	4300730885	BLACKHAWK A-1	SESE	20	135	10E	Fee (Private)		Plugged and Abandoned
99	4300730886	BLACKHAWK A-2	NWNW	29	135	10E	Fee (Private)		Producing
100	4300730914	BLACKHAWK A-3	SENE	20	13S	10E	Fee (Private)		Producing
101	4300730915	BLACKHAWK A-4	NENE	21	135	10E	Fee (Private)		Producing
102	4300730923	BLACKHAWK A-1X	SESE	20	135	10E	Fee (Private)		Producing
103	4300731402	BLACKHAWK A-5H	NENE	20	135	10E	Fee (Private)		Plugged and Abandoned
104	4300750075	VEA 32-32	SWNE	32	135	10E	Fee (Private)		Producing
105	4301530468	CLAWSON SPRING ST IPA-1	SESE	10	165	8E	Fee (Private)		Producing
106	4301530469	CLAWSON SPRING ST IPA-2	NENE	15	16S	8E	Fee (Private)		Producing
107	4300730132	ST 9-16	NESE	16	12S	10E	State	ML-44443	Plugged and Abandoned
108	4300730133	ST 2-16	NWNE	16	125	10E	State	ML-44443	Plugged and Abandoned
109	4300730141	MATTS SUMMIT ST A-1	NWNW	14	12S	9E	State	ML-44496	Plugged and Abandoned
110	4300730349	HELPER ST A-1	SENW	3	145	10E	State	ST UT ML 45805	Producing
111	4300730350	HELPER ST D-7	NWSW	4	145	10E	State	ST UT ML 45804	Producing
112	4300730357	HELPER ST A-8	NWSE	2	145	10E	State	ST UT ML 45805	Producing
113	4300730358	HELPER ST A-3	NWNW	2	145	10E	State	ST UT ML 45805	Producing
114	4300730359	HELPER ST A-4	NWNE	2	145	10E	State	ST UT ML 45805	Producing
115	4300730360	HELPER ST A-7	NESW	2	14S	10E	State	ST UT ML 45805	Producing
116	4300730362	HELPER ST A-2	NENE	3	145	10E	State	ST UT ML 45805	Producing
117	4300730363	HELPER ST A-5	NESW	3	145	10E	State	ST UT ML 45805	Producing
118	4300730364	HELPER ST A-6	NESE	3	<b>14</b> S	10E	State	ST UT ML 45805	Producing
119	4300730365	HELPER ST D-4	SWNW	4	145	10E	State	ST UT ML 45804	Producing
120	4300730366	HELPER ST D-3	NENE	5	14S	10E	State	ST UT ML 45804	Producing
121	4300730367	HELPER ST D-5	NWNE	4	145	10E	State	ST UT ML 45804	Producing
122	4300730368	HELPER ST D-8	SESE	4	145	10E	State	ST UT ML 45804	Producing
123	4300730369	HELPER ST D-2	NENW	5	145	10E	State	ST UT ML 45804	Producing
124	4300730370	HELPER ST D-6	SESE	5	145	10E	State	ST UT ML 45804	Producing
125	4300730371	HELPER ST D-1	NENE	6	14S	10E	State	ST UT ML 45804	Producing
126	4300730373	HELPER ST A-9	SENW	10	14S	10E	State	ST UT ML 45805	Producing

	API Well Number	Well Name	Qtr/Qtr	Section	Township	Range	Mineral Lease Type	Mineral Lease Number	Well Status
127	4300730376	HELPER ST B-1	SWNE	9	145	10E	State	ST UT ML 47556	Producing
128	4300730433	HELPER ST A-10	NWNE	10	<b>14</b> S	10E	State	ST UT ML 45805	Producing
129	4300730434	HELPER ST A-11	SWNW	11	145	10E	State	ST UT ML 45805	Producing
130	4300730435	HELPER ST A-12	NWSW	10	14S	10E	State	ST UT ML 45805	Producing
131	4300730436	HELPER ST A-13	NESE	10	145	10E	State	ST UT ML 45805	Producing
132	4300730437	HELPER ST B-2	NESE	9	14S	10E	State	ST UT ML 47556	Producing
133	4300730571	HELPER ST A-14	SESW	11	145	10E	State	ST UT ML 45805	Producing
134	4300730572	HELPER ST A-15	SENE	11	145	10E	State	ST UT ML 45805	Producing
135	4300730573	HELPER ST E-1	SESW	36	13S	10E	State	ST UT ML 45802	Producing
136	4300730574	HELPER ST E-2	SWNW	36	135	10E	State	ST UT ML 45802	Producing
137	4300730592	HELPER ST E-3	NENE	36	135	10E	State	ST UT ML 45802	Producing
138	4300730597	CLAWSON SPRING ST A-1	SWSE	36	158	8E	State	ST UT ML 46106	Producing
139	4300730598	HELPER ST E-4	SWSE	36	135	10E	State	ST UT ML 45802	Producing
140	4300730603	HELPER ST A-16	SWSE	11	145	10E	State	ST UT ML 45805	Producing
141	4300730635	CLAWSON SPRING ST A-2	NWNW	36	15\$	8E	State	ST UT ML 46106	Producing
142	4300730636	CLAWSON SPRING ST A-3	NESW	36	15S	8E	State	ST UT ML 46106	Producing
143	4300730637	CLAWSON SPRING ST A-4	NWNE	36	158	8E	State	ST UT ML 46106	Producing
144	4300730642	CLAWSON SPRING ST D-5	NENW	31	15S	9E	State	ML-48226	Producing
145	4300730643	CLAWSON SPRING ST D-6	SWSW	31	15S	9E	State	ML-48226	Producing
146	4300730644	CLAWSON SPRING ST D-7	NWNE	31	158	9E	State	ML-48226	Producing
147	4300730701	CLAWSON SPRING ST D-8	NWSE	31	15\$	9E	State	ML-48226	Producing
148	4300750070	HELPER STATE 12-3	SWNW	3	14S	10E	State	ST UT ML 45805	Producing
149	4300750071	HELPER STATE 32-3	SWNE	3	14S	10E	State	ST UT ML 45805	Producing
150	4300750072	HELPER STATE 32-36	SWNE	36	135	10E	State	ST UT ML 45802	Producing
151	4301530391	UTAH 10-415	NENE	10	165	8E	State	ST UT ML 48189	Temporarily-Abandoned
152	4301530392	CLAWSON SPRING ST E-7	SENE	7	165	9E	State	ST UT ML 48220-A	Producing
153	4301530394	CLAWSON SPRING ST E-8	SWSE	7	165	9E	State	ST UT ML 48220-A	Producing
154	4301530403	CLAWSON SPRING ST E-3	SENE	6	168	9E	State	ST UT ML 48220-A	Producing
155	4301530404	CLAWSON SPRING ST E-1	SENW	6	168	9E	State	ST UT ML 48220-A	Producing
156	4301530405	CLAWSON SPRING ST E-2	NESW	6	168	9E	State	ST UT ML 48220-A	Producing
157	4301530406	CLAWSON SPRING ST E-4	NWSE	6	168	9E	State	ST UT ML 48220-A	Producing
158	4301530410	CLAWSON SPRING ST C-1	SWNW	12	165	8E	State	ST UT UO 48209	Producing
159	4301530427	CLAWSON SPRING ST B-1	NENW	1	168	8E	State	ST UT ML 48216	Producing
160	4301530428	CLAWSON SPRING ST B-2	NWSW	1	165	8E	State	ST UT ML 48216	Producing
161	4301530429	CLAWSON SPRING ST B-3	NWNE	1	168	8E	State	ST UT ML 48216	Producing
162	4301530430	CLAWSON SPRING ST B-4	SESE	1	165	8E	State	ST UT ML 48216	Producing
163	4301530431	CLAWSON SPRING ST B-5	SWSW	12	168	8E	State	ST UT ML 48216	Producing
164	4301530432	CLAWSON SPRING ST B-8	SENE	11	168	8E	State	ST UT ML 48216	Producing
165	4301530433	CLAWSON SPRING ST B-9	NWSE	11	168	8E	State	ST UT ML 48216	Producing
166	4301530434	CLAWSON SPRING ST C-2	SENE	12	165	8E	State	ST UT UO 48209	Producing
167	4301530435	CLAWSON SPRING ST C-4	SWNW	14	165	8E	State	ST UT UO 48209	Producing
168	4301530460	CLAWSON SPRING ST B-7	NWSW	11	168	8E	State	ST UT ML 48216	Producing

	API Well Number	Well Name	Qtr/Qtr	Section	Township	Range	Mineral Lease Type	Mineral Lease Number	Well Status
169	4301530461	CLAWSON SPRING ST C-6	SENE	14	165	8E	State	ST UT UO 48209	Producing
170	4301530463	CLAWSON SPRING ST C-3	C-SE	12	16S	8E	State	ST UT UO 48209	Producing
171	4301530465	CLAWSON SPRING ST B-6	NENW	11	16S	8E	State	ST UT ML 48216	Producing
172	4301530466	CLAWSON SPRING ST H-1	NENW	13	165	8E	State	ST UT ML 48217-A	Producing
173	4301530467	CLAWSON SPRING ST H-2	NENE	13	16S	8E	State	ST UT ML 48217-A	Producing
174	4301530470	CLAWSON SPRING ST E-5	NENW	7	165	9E	State	ST UT ML 48220-A	Producing
175	4301530471	CLAWSON SPRING ST G-1	NWNW	2	168	8E	State	ST UT ML 46314	Producing
176	4301530472	CLAWSON SPRING ST F-2	NESE	3	16S	8E	State	ST UT ML 48515	Producing
177	4301530473	CLAWSON SPRING ST F-1	SENE	3	16S	8E	State	ST UT ML 48514	Producing
178	4301530474	CLAWSON SPRING ST E-6	SESW	7	168	9E	State	ST UT ML 48220-A	Producing
179	4301530475	CLAWSON SPRING ST G-2	NESW	2	<b>16</b> S	8E	State	ST UT ML 46314	Producing
180	4301530488	CLAWSON SPRING ST M-1	NWNE	2	168	8E	State	ST UT ML 47561	Producing
181	4301530489	CLAWSON SPRING ST K-1	SESE	2	168	8E	State	ST UT ML 46043	Producing